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ABSTRACT

The main purpose of this project was to provide comprehensive orientation and mobility training to blind juvenile and geriatric clients, in order to make them capable, safe, and independent. This report covers the project's first 3 years of operation, during the demonstration period from 1964 to 1967. In addition to a program description, the report includes case histories and an evaluation, including an analysis of success and failure factors. (BH)

THE CLEVELAND SOCIETY FOR THE BLIND RESEARCH SERIES

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LEARNING MOBILITY IN BLIND CHILDREN AND THE GERIATRIC BLIND

Final Research Report
on
Comprehensive Orientation and Mobility Training Project
for Blind School Children and the Geriatric Blind
(RD-1690-D)
to
Vocational Rehabilitation Administration
of
U.S. Department of Health, Education and Welfare

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CLEO B. DOLAN
Executive Director

1967

FOREWORD

Since its establishment in 1906, the Cleveland Society for the Blind has spared no effort in attempting to provide the most meaningful services for the blind and nearly blind persons. Many thousands of clients residing in the Greater Cleveland area, throughout Ohio, as well as from other states, have benefited from the numerous and varied services provided by the agency. A book has recently been published on this topic in which only some of the major divisions and programs of this impressive work are covered.

In recent years, however, the Society has also begun to devote serious attention to research. It is recognized that with the growing number and complexity of demands on agencies such as ours, the evaluation of projects becomes an integral part of the total functioning of an effective multiple-service agency. It is only through such evaluation that we can learn from our successes, as well as from our mistakes, and share our newly acquired knowledge with others who are being confronted with similar problems, or who are simply studying the complexities of human behavior. This complementarity of service and research has also been recognized by the various branches of the United States government, which are increasingly requesting extensive research reports on the projects supported by the Federal grants.

In behalf of the Cleveland Society for the Blind, we express our gratitude to the Vocational Rehabilitation Administration of the U. S. Department of Health, Education and Welfare, which has made our Comprehensive Orientation and Mobility Project possible. We are certain that the blind persons in Cleveland have greatly benefited, and will continue to benefit, from the services provided by this project.

It is also our firm hope that the present publication will be useful to numerous other organizations and individuals who, like ourselves, are trying to assist visually handicapped persons achieve greater independence and happiness.

Cleo B. Dolan,
Executive Director

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1. INTRODUCTION

Although orientation and mobility training of the blind received a relatively impressive amount of study,[1] much remains to be learned. A comparison of the learning potential, achievement and adjustment of the blind children and the aged blind clients is only one of the neglected areas in which the Cleveland Society for the Blind (henceforth referred to as "Society") has become strongly interested.

As, in the Greater Cleveland area, both of these groups, the blind children and the aged blind, were also in great need of comprehensive orientation and mobility services, the Society decided to add a new demonstration project, entitled "Comprehensive Orientation and Mobility Training for Blind School Children and Geriatric Clients," to its other demonstration projects and to its extensive continuous program of comprehensive services in casework, group work, home teaching, mobility, rehabilitation, camping, research, food services and several operations of its industrial division.[2]

In 1964, a proposal was developed and submitted to the Vocational Rehabilitation Administration of the U. S. Department of Health, Education and Welfare, for partial funding. The proposal was accepted and the project started its operations in November, 1964.

This final research report covers the subsequent three years of demonstration work in orientation and mobility training of the blind children and the geriatric blind clients, i.e., the period between November 1, 1964, and October 1, 1967.

The author was hired as Society's Coordinator of Research only in May, 1967. He, therefore, can claim no merit for the good points of the proposal and for the original research plans and their implementation. Similarly, he cannot accept the responsibility for some gaps in the research which have inevitably developed due to unavoidable turnover in personnel.

Not unlike other orientation and mobility projects, the Society's demonstration project was faced with the serious problem of shortage of professionally trained peripatologists. There were crises that threatened the very continuation of the project, but Society's Executive Director, Mr. Cleo B. Dolan, who personally assumed the role of the Orientation and Mobility Project Director, managed to develop various emergency measures (to be briefly described in Chapter 3) which succeeded in saving the project. Since during the last few years great strides have been made in the professional training of peripatologists, it is hoped that future orientation and mobility work will no longer suffer from such acute shortages of well-qualified mobility instructors.

The greater part of this study represents ex post facto research and the writer is greatly indebted to several persons without whose kind cooperation this research would not have been possible.

Several peripatologists have at one time or another served on the project and provided the orientation and mobility data on which the report is based, notably Mr. George Auzenne, Mr. René Paquin, Miss Susan Hoehn (now Mrs. Sullivan), Mrs. Gwenn Ann (Miller) Sherman, Mrs. Martha Ball Rosemeyer and Mr. Anthony Lewis.

The writer is indebted for the case history information to the following caseworkers: Mrs. Tatiana Graper, Mrs. Myra Oryshkewych and Mrs. Carrie Turner; to Society's Coordinator of Children's Services, Miss Patricia Stone; to the home teacher, Miss Mary Hugo; to the Casework Supervisor, Mrs. Audrey MacDougall;

and especially to the Director of Program Services, Mr. Harold W. Drane, with whom the entire project was periodically reviewed.

The Project Director, Mr. Cleo B. Dolan, tried hard to optimize the working conditions for both the action staff as well as for the research. He deserves a large share of credit for the development, continuation and success of the entire project.

In this research, as well as in several other studies, the author received exceptionally capable and enthusiastic help from his research assistant during the summer vacations of 1967, Miss Susan A. Brooks, a psychology senior from Marquette University. Author's wife, Milena, read the entire manuscript and contributed many valuable suggestions. Miss Lois Carmitchel and Mrs. Louise Gillespie provided the secretarial services with characteristic patience and efficiency.

One needs hardly emphasize the fact that without the support of the U. S. Vocational Rehabilitation Administration and without the deep commitment of the Cleveland Society for the Blind this project could not have been conducted. Both sponsoring organizations deserve credit for their noble efforts to help the handicapped persons to achieve a greater degree of usefulness and self-fulfillment in spite of their various disabilities.

The study is divided into three parts. In Part I, we try to provide the available relevant background information on the project's purpose and personnel; on various programs, approaches and techniques; and on the characteristics of our clients.

In Part II, illustrative case histories of blind children and of the geriatric blind clients are presented. It is hoped that they may be helpful in providing a better insight, both into the processes of the orientation and mobility training and into various personality organizations of the relatively successful and the relatively unsuccessful clients.

Finally, in Part III, the major findings on the two groups of clients are presented and analyzed and some final observations made on this demonstration project and its relevance for the area of orientation and mobility and for behavioral science in general.

FOOTNOTES

1. Cf. Industrial Home for the Blind, Instruction in Physical Orientation and Foot Travel, New York: Industrial Home for the Blind, 1950; Donald R. Griffin, Listening in the Dark, New Haven, Conn.: Yale University Press, 1958; Dickson Hartwell, Dogs Against Darkness, New York: Dodd Mead and Co., 1960; Paul Zahl, Blindness: Modern Approaches to Unseen Environment, New York: Hafner Publishing Co., 1962; Rosanne Kramer, "Personality and Attitudes of Blind Teen-Agers Learning Cane Travel," Research Bulletin (American Foundation for the Blind), December, 1962, pp. 57-71; Martha J. Ball (Rosemeyer), "Mobility in Perspective," Blindness 1964, Washington, D. C.: American Association of Workers for the Blind, 1964, pp. 107-141; J. A. Leonard, "Mobility and the Blind--A Survey," Research Bulletin (American Foundation for the Blind), December, 1964, pp. 1-25; Bryant J. Cratty, Perceptual Thresholds of Non-Visual Locomotion, Los Angeles: University of California, 1965; D. Liddle, "Cane Travel: Techniques and Difficulties," Research Bulletin (American Foundation for the Blind), October, 1965, pp. 1-62; Fay-Tyler M. Norton, Improving and Accelerating the Process of Raising the Hearing of Blinded Persons to a Greater Degree of Usefulness, Cleveland, Ohio: The Cleveland Society for the Blind, 1960.

2. For a detailed description of the Society's facilities, programs and projects consult, Cleveland Welfare Federation, The Cleveland Society for the Blind: Periodic Review of Agency Program and Operation, Cleveland, Ohio: The Cleveland Society for the Blind, 1962; Eva Brewer Palmer, Allan W. Sherman, Cleo B. Dolan et al., The Cleveland Society for the Blind, 1906-1960, Cleveland, Ohio: The Cleveland Society for the Blind, 1961; Arthur C. Kaufman and Associates (Management Consultants), "Visits to Other Agencies Serving the Blind: Cleveland Society for the Blind," Report on a Management and Operating Study of Pennsylvania Working Home and Philadelphia Association for the Blind, Philadelphia, Pa.: A. C. Kaufman and Associates, 1967, pp. 65-72 ff.

2. PURPOSE

The main purpose of the project was to provide comprehensive orientation and mobility training to the juvenile and the geriatric clients in order to enable them to become as safe, capable and independent as possible in mobility and to achieve a greater degree of over-all independence and personal happiness.

Take, for instance, the case of Maria,[1] a young grade school pupil who has been blind since birth. At the start of the project, she had no idea of the layout of the school building where she had been attending classes for the last six years. She walked from one place to another on impulse, being moved by a sound or an air current that happened to come her way. Her spatial orientation was nil. Maria desperately needed orientation and mobility training, as well as a great deal of stimulation and emotional support.[2]

Yet, Maria was only one of over 200 blind children registered with Society's Coordinator of Children's Services who could, and should, profit from comprehensive orientation and mobility training.[3]

The Society wanted to provide orientation and mobility training for as many of these children as possible -- to help them to find their way around more safely and effectively and to prevent them from developing certain bad habits of gait, posture, etc. Successful orientation and mobility training should also enable a substantial proportion of these children to become more self-sufficient and better adjusted individuals, and more fully integrated in the sighted society.[4]

Or let us look at a geriatric client, such as Mr. Jones, age 71, who bitterly complained: "All I do is sit, sit and sit. I have many friends in the neighborhood, but I can't do anything. I just sit."

The Society wanted to do something to help Mr. Jones and as many as possible of the 900 and more geriatric blind persons in the Greater Cleveland area. Its comprehensive orientation and mobility project was designed to help these clients and, at the same time, to learn as much as possible about the most effective ways of providing the needed orientation and mobility training under the given conditions.[5]

A comparison between these two age groups, and various subgroups, has become one of the objectives of the research, since the increased knowledge about what the orientation and mobility trainees have in common and what are the important differences among various groups and subgroups would, undoubtedly, facilitate and increase the effectiveness of services for the blind.[6]

FOOTNOTES

1. Unless otherwise indicated, all names of clients in this study are fictitious.

2. For information on some of the work done with the young blind, consult Milton D. Graham, Ph.D., Social Research on Blindness: Present Status and Future Potential, New York: American Foundation for the Blind, 1960, pp. 76-140.

3. Cf. Letter by Cleo B. Dolan, Executive Director of Cleveland Society for the Blind, to Mr. Fred A. Schumaker, Research Analyst, Vocational Rehabilitation Administration, dated October 9, 1964.

4. Cf. Miriam Norris, Patricia J. Spaulding and Fern H. Brodie, Blindness in Children, Chicago: The University of Chicago Press, 1957; Louis S. Cholden, A Psychiatrist Works with Blindness: Selected Papers, New York: American Foundation for the Blind, 1958; Thomas D. Cutsforth, The Blind in School and Society, New York and London: D. Appleton and Co., 1933; Hector Chevigny and Sydell Braverman, The Adjustment of the Blind, New Haven, Conn.: The Yale University Press, 1950; see also, Rudolf Pintner, Jon Eisenson and Mildred Stanton, The Psychology of Physically Handicapped, New York: T. G. Crofts and Co., 1941; Roger Barker, Adjustment to Physical Handicap and Disability, New York: Social Science Research Council, 1953.

5. Concerning the work with adult blind, see Graham, op. cit., pp. 43-75.

6. Cf. A. T. Welford, *Aging and Human Skill*, New York: Oxford University Press, 1958. See also Robert M. Barnett, "Blindness Among the Aging: A Growing Dual Problem," *New Outlook for the Blind*, February, 1956, pp. 65-68; Cutsforth, op. cit., pp. 121-145 ff.; Giles Edward Gobetz, *Home Teaching of the Newly Blinded Geriatric Clients: Progress Report to the U. S. Administration on Aging*, Cleveland, Ohio: The Cleveland Society for the Blind, Spring, 1967, pp. 5-17; C. W. Bledsoe, "Blind Patients as Domiciliary Members," *New Outlook for the Blind*, April, 1957, pp. 140-144; James F. Garret, *Psychological Aspects of Physical Disability,* Washington, D. C.: Government Printing Office, 1952; John E. Anderson (Ed.), *Psychological Aspects of Aging*, Washington, D. C.: American Psychological Association, 1955.

3. PERSONNEL

It has been said that an action program is only as good as the actors in it. Who were the actors in our Orientation and Mobility project?

Mr. Cleo B. Dolan, Executive Director of the Cleveland Society for the Blind, served as Project Director. He was awarded a Master Degree in Social Administration by the Ohio State University in 1945 and continued with further studies in Social Administration at the Ohio State University. He also studied law at Capital University Law School. Mr. Dolan was Assistant Superintendent of the Boys Industrial School in Lancaster, Ohio, between 1954 and 1956. During 1956 and 1957, he served as Research Consultant for the Ohio and Indiana National Probation and Parole Association, under a Ford Foundation grant to develop greater interest and understanding in the field of delinquency and crime prevention and control. For the next two years, Mr. Dolan was Assistant Chief, Division of Social Administration, Ohio Department of Public Welfare, as well as Administrator of Services for the Blind, an area that included vocational rehabilitation, small business enterprises, vending stand program, and social service and prevention of blindness programs. Since 1958, Mr. Dolan has been Executive Director of the Cleveland Society for the Blind. Under his directorship, Society experienced a rapid growth, with the erection of new facilities, including a modern Sight Center, and a great expansion and diversification of its programs and projects.[1]

The following peripatologists acted as project's orientation and mobility instructors:

Mr. George Auzenne, who received a Master of Education Degree in

Peripatology from Boston College in 1962 and had previously been employed at the Perkins School for the Blind, joined Society late in 1964 and remained on its staff until September, 1966. At that time, he left to continue his studies for a doctorate at the Michigan State University.

Mr. René Paquin received a Master of Education Degree in Peripatology from Boston College in 1964 and worked on Society's Orientation and Mobility project from September, 1964, to April, 1965, when he left to accept a position in his native state of New Hampshire.

Miss Susan Hoehn received her Master of Education Degree in Peripatology from Boston College in 1965 and worked on our comprehensive orientation and mobility project from July, 1965, to August, 1966, when she departed to get married in Indiana.

Mrs. Gwenn Ann (Miller) Sherman received a Bachelor Degree in Psychology from the University of Toronto in 1966 and was trained by the Cleveland Society for the Blind to work on this demonstration project from July, 1966, to April, 1967, when she left for Detroit, Michigan, due to her husband's reassignment there.

The training of Mrs. Sherman was an emergency measure which the Project Director had to take to save the project for which no professional peripatologists could be obtained. Late in 1964 and in January, 1967, other emergency measures were taken in order to continue with the project. In January, 1967, Mr. Dolan convinced Mrs. Martha Ball Rosemeyer, a highly regarded peripatologist who had briefly worked on the project at its beginning, to return on a part-time, two-days-a-week basis, in spite of her duties as a housewife and mother of two small children. Mr. Anthony Lewis, a former VISTA volunteer with the Society, like Mrs. Sherman earlier, received thorough training at the Society's Sight Center and, in October, 1966, became project's Mobility Assistant, responsible for the training of geriatric clients.[2]

This constant but unavoidable turnover of orientation and mobility instructors was, undoubtedly, the most difficult problem of the entire project. It created some discontinuities in the orientation and mobility training of the clients (for some of whom the instructors may have become much more than just instructors)[3] and it also inevitably produced several gaps in the collection and analysis of the research data.

The present writer, whose background is in sociology and psychology teaching and research, and who joined the Society only in May, 1967, tried to obtain and analyze all existing relevant data and also mailed retrospective questionnaires to project's former peripatologists. At the same time, the collection and analysis of the data between May and October, 1967, was intensified.

During summer vacations of 1967, Miss Susan A. Brooks, a psychology senior from Marquette University, served on the project as a part-time research assistant.

With the exception of two mobility instructors, all the staff members who served on the project had good professional qualifications for the positions which they occupied. The two Society-trained mobility instructors, too, functioned well in their respective roles, under close supervision of professional peripatologists.

FOOTNOTES

1. Cf. Cleveland Welfare Federation, The Cleveland Society for the Blind: Periodic Review of Agency Program and Operation, Cleveland, Ohio: The Cleveland Society for the Blind, 1962; Arthur C. Kaufman and Associates (Management Consultants), "Visits to Other Agencies Serving the Blind," Report on a Management and Operating Study of Pennsylvania Working Home and Philadelphia Association for the Blind, Philadelphia, Pa.: A. C. Kaufman and Associates, 1967, pp. 65-72 ff.

2. Cf. Giles Edward Gobetz, Martha Ball Rosemeyer, Anthony B. Lewis and Susan A. Brooks, Comprehensive Orientation and Mobility Training for Blind School Children and Geriatric Clients: Progress Report to U. S. Vocational Rehabilitation Administration, Cleveland, Ohio: The Cleveland Society for the Blind, June, 1967, pp. 15-19.

3. Cf. Margaret Mead, "Adolescence in Primitive and in Modern Society," Guy E. Swanson, Theodore M. Newcomb and Eugene L. Hartley (Eds.), Readings in Social Psychology, New York: Henry Holt and Co., 1952, pp. 231-239.

4. DESCRIPTION OF PROGRAMS

Preparatory Phase

As stated earlier, there were over 900 legally blind elderly persons and over 200 known blind children in the Greater Cleveland area at the time when the proposal for the project was submitted.

Although the Society would wish to give all needed orientation and mobility services to each and every client in the area, it was clear that only a fraction of potential clients could be included in this demonstration project.

Children, as a group, were much better known to the Society than the geriatric clients. Late in 1964 and early in 1965, the project personnel, therefore, conducted a survey to find out who, exactly, should be included from among the elderly blind. First, a list of the nursing homes and of hospitals having geriatric wards was made and the number of such establishments rose to no less than 112, although the list was probably incomplete.[1] Non-institutionalized elderly persons were, of course, in equal or greater need of orientation and mobility training but they were, as a rule, referred for such training by Society's caseworkers or home teachers.

To gain a better insight into the orientation and mobility needs of both institutionalized and non-institutionalized groups of the geriatric blind, two approaches were adopted late in 1964 and early in 1965: (1) the organization of conferences and seminars with persons dealing with the institutionalized elderly blind persons and (2) meeting with samples of institutionalized and non-institutionalized geriatric blind persons.

Conferences, Seminars and Workshops

On November 16, 1964, the project staff met with Mrs. Jean Miller, General Activity Director of the Wright Nursing Home, located on the west side of Cleveland, and with Mrs. Grace Elliott, General Activity Director of the MacGillis Nursing Home (East Cleveland) and also local chairman of the General Activities Organization for the Cleveland area.

Mrs. Miller and Mrs. Elliott were anxious to find out more about the techniques and procedures for working with blind and partially sighted geriatrics. Both ladies stated that their biggest problem was "how to accommodate those with poor vision" and they assured the project staff that this seemed to be the consensus of the staff, as well as of volunteers, working with the nursing home residents.

The peripatologist further commented on the meeting:

> They [Mrs. Miller and Mrs. Elliott] gave us a great deal of insight into some of the reactions of geriatrics to activity, to loss of sight and to old age in general, with its deteriorating effects. Family interaction, too, was discussed.
>
> We also discussed the reaction of the nursing home staff to the geriatric: their fear of the patient's falling, the constant turnover of staff and the lack of professional preparation and attitude on the part of the staff.
>
> We decided that they [activity directors from nursing homes] could help us with our mobility project and that we could help them with their problem.
>
> The decision was made that we [orientation and mobility staff] would come to their December 7 [1964] meeting and discuss the ideas of mobility and techniques for a blind person. This would be followed up by a more comprehensive seminar in late January [1965] at which we would demonstrate techniques under blindfold and explain orientation and mobility.
>
> It was also decided that the mobility staff would go to the two mentioned nursing homes to observe their group sessions, prior to the December 7 [1964] meeting.

A review of records and correspondence suggests that the December 7, 1964, meeting was satisfactory to all who attended and that January 28, 1965, was selected for the seminar, "Blindness and the Geriatric," to be held at the Sight Center of the Cleveland Society for the Blind.

The seminar took place as planned and it dealt with the following topics:

1. Introduction to blindness,
2. Orientation and mobility for the blind geriatric, and
3. Crafts and group activities applicable to blind persons.

One or more persons attended the seminar from each of the following institutions or organizations serving the elderly (including some geriatric blind):

Catholic Charities Bureau
Cleveland Health Department
Cleveland Society for the Blind (as host)
Cuyahoga County Chronic Illness Center
Jennings Home
MacGillis Nursing Home
McGregor Nursing Home
Madonna Hall
Mapleside Nursing Home
Margaret Wagner House
Mary Louise Nursing Home
Montefiore Home
Singleton Nursing Home
Welfare Federation of Cleveland, and
Wright Nursing Home.

Several additional meetings and seminars were held during the preparatory stage of the project, culminating in a three-day Orientation and Mobility Workshop on April 21, 27 and 30, 1965. This workshop was conducted by the project staff, with Mr. Frederick Silver of the Boston College Peripatology Program as guest speaker at the last session.

The stated purposes of the workshop were:

1. To demonstrate to parents some techniques that can be used to aid visually handicapped children in gaining orientation and mobility skills.

2. To demonstrate to teachers and other school personnel orientation and mobility techniques which can be employed in the classroom.

3. To provide to these interested people some insights into problems which may be incurred by the visually handicapped.

4. To provide an opportunity for an exchange of ideas in regard to the preschool visually handicapped child.

5. To discuss the posture and gait problems of the visually handicapped child and what measures can be used to correct them.

These purposes were pursued in the following program, as outlined by project's peripatologists:

First Session: April 21st

1. Purposes of workshop explained 20 min.

2. Introduction of instructors and division into two working groups. Instructors will pass out blindfolds and give general outline of course and goals to be achieved. During periods of instruction, half will be blindfolded and half will remain sighted and act as instructors. 25 min.

3. Demonstration of human guide techniques and practice of these by participants.

4. Discussion and demonstration of concepts involved in general orientation (classroom, home, etc.), followed by practice by participants. 30 min.

   A. Establishing relationships within home, specific rooms, classroom and school building.
   B. Making use of permanent points of reference.
   C. Making use of sound sources, stationary and mobile.

5. Coffee break 10 min.

6. Discussion

Second Session: April 27th

1. Introduction of cross-body techniques and various protective techniques for retrieving dropped articles, location of chairs, trailing, followed with practice by blindfolded participants. 45 min.

2. Coffee break 15 min.

3. Discussion of independent modes of travel, dog and cane. Discussion of role of cane and demonstration of its use indoors, followed by practice by blindfolded participants. 45 min.

Third Session: April 30

1. Discussion of problems of preschoolers and problems of gait and posture which must be solved before independent travel techniques can be learned. 45 min.

2. Coffee break 15 min.

3. Demonstration of outdoor cane techniques with active participation of parents and teachers. 1 hour

4. Mr. Silver, Senior Peripatology Instructor of Boston College, guest speaker. 30 min.

A report on the workshop was prepared by the peripatologist, Mr. George Auzenne. It reads:

> The workshop was initiated with the over-all purpose of demonstrating to parents [of blind children] how they could help their children to achieve greater freedom in mobility and provide an opportunity for exchange of ideas among parents. Inasmuch as the workshop was being held as part of the orientation and mobility project granted to this agency by the Vocational Rehabilitation Administration of the U. S. Department of Health, Education and Welfare, school administrators and teachers of the blind and partially sighted were invited to attend. It was hoped that by so doing they might be sufficiently motivated to incorporate orientation and mobility training as a daily part of a child's curriculum.
>
> Approximately 35 persons were in attendance at each session. The majority of these were parents of children already in school. A few parents of preschool children and a few educators comprised the rest of the participants. The attendance was fairly consistent with the same set of parents present each time.
>
> The workshop as a whole was received with a great deal of enthusiasm. Everyone actually participated in the demonstration and the discussions which followed were always lively and informative. Many parents said they had not realized some of the basic problems in orientation and mobility prior to this and promised they would try to apply the techniques demonstrated at home.
>
> During the third session, mention was made of some useful techniques which might be applied to eating. This generated such a response that it was decided a dinner would be held in which the participants would supply the food and eat it blindfolded.

As we read later, in a report written by Mr. George Auzenne, the decision concerning the dinner was not a matter of momentary enthusiasm which would subside after the meeting:

> The pot-luck dinner was held on June 7 [1965]. Again, most of the same participants were in attendance. Basic instructions and useful hints were given by Miss Hoehn [peripatologist on the project] prior to eating. The format followed that of previous sessions. Everyone was paired with someone else in the audience. One was blindfolded while the other watched and gave instructions. Midway through the meal this was reversed.

The conferences, seminars and workshops which were originally planned by the project staff in the hope that they might provide some new understandings and insights for the optimum implementation of the orientation and mobility programs, certainly proved useful for this purpose. Surprisingly, however, the emphasis has quickly shifted in the process, as the project staff was increasingly expected to share its superior knowledge on the subject of orientation and mobility, and blindness in general, with other agencies and institutions and with interested parents and educators.

Program with Institutionalized Geriatric Clients

The reports from the nursing homes and other institutions on the blind and partially blind geriatric clients left little doubt that, in nursing homes alone, there were more persons in need of orientation and mobility training than the entire project staff could handle. Exploratory approaches, then, had to be made and the Montefiore Home[2] was the first home selected for this purpose.

The Montefiore Nursing Home

The exploratory program at the Montefiore Home was launched on February 2, 1965, with a Montefiore staff seminar conducted by Mrs. Rosemeyer and Mr. Auzenne, the project peripatologists. The purposes of the orientation and mobility project were explained and the problems of the visually handicapped geriatric residents at Montefiore Home discussed. It was agreed that the caseworkers at Montefiore would nominate candidates for orientation and mobility training, with rejection or acceptance being decided by the peripatologist after individual evaluation.

Seven candidates (six females and one male) ranging in age from 69 to 97 years, with a mean age of 77.9 years and a median age of 73 years, were nominated.

The seven residents were given a thorough evaluation to determine their physical ability to walk, their memory, sense of direction, the spatial awareness in the rooms in which they lived and in the rest of the building, ability to find various parts of the building and their mental and emotional condition.

We shall here present a brief summary on the peripatologist's contacts with, and impressions on, each selected client. It is hoped that these summaries may shed some valuable light on the institutionalized geriatric clients who need, or are thought of as needing, orientation and mobility training.

Let us start with the oldest selected client:

Mrs. B., age 97. Mrs. B. was first interviewed on May 3, 1965. She immediately began to banter with the instructor and, on the whole, appeared to be alert both physically and mentally. After settling down, she commenced to tell the peripatologist about her personal problems and became rather upset. After calming down, she apologized for her behavior. The peripatologist ended the session with the promise to see her again soon.

Mrs. B. was seen again on May 10, 1965. She remembered the peripatologist immediately and again resumed her banter. Then the instructor asked her to show him around the building, which she did without the slightest difficulty. Orientation and mobility training was not needed, therefore, the sessions were terminated.

Mrs. G., age 83. The client was first interviewed on March 3, 1965. She appeared to be somewhat out of touch with reality, often giving inappropriate answers to questions asked. She was at all times, however, pleasant and charming. She escorted the peripatologist to the elevator and blew a kiss as he said goodby.

Mrs. G. was seen for physical orientation and mobility evaluation on March 8, 1965. She was asked to walk to the dining room and locate her chair. She agreed to do this, but had to get "ready" first. After gathering her glasses and purse and going to the bathroom, she bade the mobility instructor goodby and left. She proceeded to go to the physical therapy room, using the elevator without difficulty. It was decided that mobility training was not necessary.

Mrs. P., age 79. Mrs. P. was first seen on February 26, 1965. She gave the appearance of an alert intelligent woman, but somewhat dependent. Her vision had decreased to peripheral vision in the right eye and the ability to see forms in the left. She complained of not being able to do "anything" since her vision had worsened. She stated that her goal was to be able to reach the recreation and physical therapy rooms and also to facilitate going to and from the dining room.

The client was seen twice after the original interview. It was discovered that she could actually go to the recreation, physical therapy and dining rooms alone but only needed encouragement and assurance. An attempt to give her this assurance was made and training was terminated. At a later date, she was observed walking through the building quite efficiently.

Mrs. O., age 73. Mrs. O. was first interviewed on March 3, 1965. She talked a great deal, mostly of her son in Dayton, but her mental processes seemed to be deteriorated. Her capacity for immediate recall was poor. She did not appear to be enthused over my reasons for being there.

Mrs. O. was seen twice after the initial interview. On the first occasion, she was asked to locate various points within the building, which she did without difficulty. In the final session, she was given a white orthopedic cane which she used primarily for support. Training was terminated.

Mr. G., age 73. Mr. G. was interviewed on April 26, 1965. He appeared physically and mentally alert and had useful travel vision. He was in a habit of going out with a friend, utilizing public transportation. He demonstrated his ability to reach the bus stop alone without difficulty. Training was not indicated, therefore, the case was closed.

Mrs. K., age 71. Mrs. K. was seen on February 26, 1965. She is a small woman, "confined" to a wheel chair since a hip fracture approximately two years ago. The medical opinion seems to be that she can walk, but is weak and fearful. At the time, she expressed a desire to be more active physically; however, it was noted that her mind wandered, jumping from one subject to another.

A goal of leaving the wheel chair and utilizing a walker was set for Mrs. K. This was never realized and the goal was changed to orientation to the building.

Mrs. K. was seen a total of ten times after the initial interview. The sessions lasted from 15 to 30 minutes. She tired easily and the duration of her concentration was very short. In spite of the fact that she was seen twice a week, she sometimes had difficulty remembering the instructor's voice or who he was.

On other occasions, she seemed to have been waiting for his arrival. On these occasions, however, she seemed to have considered his visit a social one. As a rule, the client was cheerful and quite witty. She tried hard to do well and apologized when she did not. After the sixth lesson, it became apparent that the client was not absorbing the things

> being discussed. There were times when she could not recall an item of information at the end of a lesson, although this information had been given to her at the beginning.
>
> Mrs. K.'s training consisted of an attempt to make her aware of her immediate surroundings. An attempt was also made to make her aware of the rooms in which she spent most of her time -- her bedroom, the dining room and the occupational therapy room. None of the attempts were successful. Even though she was taught various cues with which she could identify the various rooms, she seldom could remember where she was or how she got there. After several more attempts, it was decided to terminate her training and declare her non-feasible for further orientation and mobility.
>
> Mrs. A., age. 69. Mrs. A. was first seen on April 5, 1965. She appeared very alert mentally and physically, although she moved with the aid of a walker -- having suffered a hip injury sometime before. She had very little useful vision and expressed a concern for running into people and people running into her. Her greatest fear concerned using the elevator, being afraid (realistically so) of getting the walker in the separation between the elevator and the floor. In this initial session, she walked to the dining room without any problems. The client also displayed a very good memory, identifying voices and footsteps she infrequently heard.
>
> Mrs. A. was seen over a period of two months, concentrating on reaching various parts of the building by different routes. Her confidence increased and she no longer seemed so concerned with running into people or vice versa. Her fear of the elevators was not overcome and the point was not pressed as there was a certain amount of danger involved. Training was terminated June 7, 1965.

Mr. George Auzenne, the peripatologist who worked with the Montefiore clients and made additional exploratory visits to other nursing homes, summarized his impressions:

> According to the observations made and the results obtained at Montefiore and other homes, it appears doubtful that such endeavors make the wisest use of the peripatologist's time. It begins to appear that few of the visually handicapped residents in nursing and rest homes have need of help, the majority of them either having useful vision or having learned their way around the building. Out of the remaining minority which has need of orientation and mobility training, many could not profit from such training due to secondary handicaps, including senility. The few who could be helped require a great deal of time to produce even intangible results, due to short concentration spans and a limited physical tolerance. In view of the above observations, it is recommended that a staff member of the nursing home, or volunteer, be trained to give the limited orientation and mobility which would be necessary. This "aide" would be responsible to the peripatologist and would work under planned supervision. Such a

procedure has proven effective on a previous occasion and is worthy of serious consideration.

Programs with Non-Institutionalized Geriatrics

Non-institutionalized geriatrics were selected for direct comprehensive orientation and mobility training, partly at the Society's Sight Center and partly in their homes and in various city areas.

Clients were being taught the orientation and mobility skills according to their ability and needs. The peripatologists outlined several phases of training, proceeding from the simpler to more complex approaches.[4] Some clients went only through one phase or two, while others received a thorough step by step training in all phases.

These phases were classified as follows:

A. Use of human guide
B. Indoor phase I
C. Indoor phase II
D. Outdoor phase I
E. Outdoor phase II.

In order to understand the orientation and mobility training, we must look at each phase in more detail.

A. Use of Human Guide

There are certain situations in which a blind person may have need for the aid of a sighted person (e.g., extremely crowded conditions, when crossing a busy street, when he has or can use no walking device such as a cane or a dog, etc.). When this is the case, certain techniques should be employed, to assure maximum safety, facility and effectiveness of the movement of the blind person using a human guide. These techniques may be described as follows:

1. The guide's arm should be held freely at side; it does not have to be flexed at elbow or rigid.

2. The blind person should hold guide's arm above elbow with thumb on side of arm nearest body.

3. The blind person's grip on the guide's arm should be sufficiently firm to prevent loss of contact in case of sudden turns, stops, etc., yet also sufficiently relaxed so no discomfort is perceived by guide.

4. The blind person should remain approximately one half step behind and one step to the side of the guide, while holding his arm.

5. The blind person should develop the ability to walk easily with a guide without being dragged by him or giving the guide the sensation of being pulled. This is developed through repeated practice.

6. For greater facility of movement, the blind person and guide may develop certain non-verbal signals. This can be done by applying pressure on the hand of the blind person by the guide squeezing his arm toward his body. The signals can be used to interpret "step up" and "step down." To indicate a narrow passageway or doorway, etc., the guide should bring his arm in behind his back, thus motioning the blind person to step in behind him.

B. Indoor Phase I

Before the blind person attempts to use a cane or travel outdoors, affirmation of his ability to move safely and efficiently indoors should be sought. To determine this, the blind person should be able to display the following safety techniques:

1. Facility of movement. The blind person should display facility of movement within his capacity. Inhibited movements caused by emotional and/or physical factors are a hindrance to traveland often the cause of poor orientation. The

blind person should display ability to move forward, backward or laterally (side-step) maintaining a fairly straight course. The person should be able to make a quarter turn without turning less or more than 90°, and a half turn turning not more or less than 180°, a full turn turning no more or less than 360°.

2. Interpreting directions. The person should listen to directions and should be able to follow them. He should understand difference between right and left and show ability to move or turn in indicated directions.

3. Compass directions. Blind person should know the points of the compass and should be able to identify and locate three when given one as a reference point. This ability is necessary for orientation and is often an indication of abstract reasoning ability.

4. Maintaining correct posture. Person should manifest correct posture with proper body alignment. The head should be neither tilted nor turned, the arms and hands should be at his side in a relaxed manner. The body weight should be evenly supported and not shifted forward over balls of feet, nor backward over heels, nor laterally. The toes should point straight ahead and should not be rotated inside or outside.

5. Indoor protective position. Arm should be held approximately chin high with forearm parallel to floor, making sure fingers are extended slightly beyond opposite shoulder with arm flexed at an angle greater than 90°. The opposite arm is draped in front of body with palm facing out or in.

6. Trailing techniques. With one arm in the protective position as described above, the other is used to follow wall. The back of the hand is used in doing this with fingers curved inward to avoid jamming them. The person should remain approximately eight inches from wall to avoid possibility of shoulder hitting obstacles projecting from wall such as fire extinguishers, changes in wall, water fountains, projecting signs, etc. The hand should be approximately one foot in front of the body, to give adequate reaction time.

7. Tracking, locating and retrieving dropped articles. Tracking is the ability to follow the path of the article as it rolls or slides along the floor or ground. Locating is the ability to form an adequately accurate judgment as to where the article has stopped and the ability to move safely to it. Retrieving is the process used in picking the article up. The blind person should assume the protective position for head and shoulders as described in 3-5 and utilize knee bend or a close approximation as it is not safe to bend from waist. In locating the article on floor or ground, the trainee may move his hand in concentric circles, beginning with small circles close to body and broadening them as hand moves away from body or in a vertical-horizontal motion, moving hand in a vertical pattern, then in a horizontal pattern crossing over the vertical lines, thus completely covering an area.

8. Locating and sitting in a chair. Once the chair is located, the trainee determines where the back rest is and, keeping his hand there, uses his other hand to sweep the seat, determining if an article is on the chair; then, if the chair is free, he sits, keeping his hand on the back of the chair until seated.

9. Correct posture. Person should sit in an erect but relaxed position. While it is recognized that few persons, sighted or blind, sit in a completely erect position at all times, observations should be made for gross deviations and corrections should be made.

C. Indoor Phase II

This phase is primarily concerned with the use of the cane in indoor situations. At this time the person should be fitted with a cane that will provide him with a maximum of protection and will still be a comfortable tool to handle. Objectively, the top of the cane, if measured against the person, should come up to the sternum. However, at a later date, due to the person's stride and rate of speed, the cane may prove too short and a longer cane may be necessary. Therefore, a subjective measurement should be taken when the person moves into the outdoor phase.

The following points need special attention:

1. Identification. The trainee should be able to identify parts of the cane (crook, shaft, and tip). He should also know the material of the tip and how to replace it when necessary.

2. Arm and hand position. The cane is gripped just below the crook with whole hand. The thumb should be extended on the shaft and the crook should face outward and over the hand. The arm should be held straight (elbow not flexed) at an angle that is approximately 45° to the frontal plane of the body.

3. Position of cane. When properly held, the cane, viewed from the front, should form a diagonal across the body. The tip should be approximately two feet anterior and slightly beyond the opposite shoulder. The hand holding the cane should be approximately 9-12" in front and slightly lateral to the lower abdomen.

4. Use of cane. The trainee in walking with the cane should maintain the diagonal position with the tip of the cane close (approximately 1/2") to floor. If the cane makes contact with an article in the direct path of user, the person should move the tip of the cane carefully to one side of obstacle to determine if path is sufficiently wide to permit passage. If it becomes necessary to touch obstacle with hand for identification, the tip of the cane is left on the floor at the point of contact with the obstacle and the cane then is brought to a vertical position so that the shaft is in contact with the obstacle. The person should then walk carefully up to the obstacle. This should prevent unnecessary groping from a distance.

5. Stairs. When contact is made with a staircase (upstairs) the bottom part of the shaft of the cane is moved along the edge of the first step so that

trainee may position himself centrally. The cane is moved vertically so that the tip of the cane is resting on the first step; this is used to determine the height of the step. The cane is then moved forward so that the shaft is in contact with the edge of second step; this determines depth of step. The cane is then moved laterally in both directions to determine the location of railings or the absence of such. After practice, the trainee should be able to do this in one fluid motion. The cane is next moved upwards so that the tip of the cane is touching the edge of the third step, but not resting on the step. The hand should slide down the shaft of the cane for greater comfort and there should be two steps between the trainee and the tip of the cane. Maintaining the same distance between the cane and the user, the trainee should walk up the stairs and when the cane reaches the top of the stairs, he should "sweep" the landing by moving the cane laterally in both directions, keeping the tip of the cane on the floor. This, too, should be performed with one continuous motion.

When contact is made with a down staircase, the cane should be held against the edge of stairs and the trainee should move up to the cane. Basically, the same procedure is followed for checking depth, width, location or absence of railings. The cane is held as described in C-3, except that the cane and the arm are stretched out and pointed down. The trainee should proceed down the steps, with the tip of the cane just missing each succeeding step; it should not touch anything until the trainee reaches bottom and then it should touch the floor one step before he reaches that level. A modification of this method is to hold the tip of the cane against the edge of the first step and to touch each succeeding step as trainee is descending. It should be emphasized that railings should be used whenever present.

When using the cane indoors or out, care should be taken to keep from using the cane for pointing or gesturing as this could be a source of danger to others.

D. Outdoor Phase I

The techniques taught in this phase should concentrate on the mechanics of outdoor travel, i.e., use of the cane, utilization of cues, etc. All the techniques described below, with the exception of number ten, should be initially taught indoors. This makes for greater concentration on the part of the client with less distractions. The client should understand why this is being done and the possible differences that may exist.

1. Grip of hand on cane. Cane should be held below crook. The cane is supported by the middle finger and the heel of the hand, with the forefinger extended down the side of the shaft and the thumb on the top. The grip should be firm, yet relaxed to provide rigidity with flexibility.

2. Arm position. The arm should be extended in front of the body with the hand held approximately at the center. The elbow is not flexed as this will shorten the distance between the tip of the cane and the user and also can cause the arc to be one-sided.

3. Use of the cane. With the arm in the above described position, an arc is made that should be only slightly wider than the shoulders of the trainee. The cane should touch the ground lightly at the extremities of the arc and should be as close to the ground as possible or "flat" in the center. The arm should be held stationary. When walking, the arc is described in a one-to-one relationship with the footsteps, i.e., the cane should touch once for every step taken. The tip of the cane should always be touching in front of the foot that is behind. The person should concentrate on moving the wrist, making the arc in the proper width and height before attempting to walk.

4. Walking straight. The trainee should be able to keep an adequate straight course when walking. If he veers more than approximately five feet in

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either direction, this should be a cause for concern. The instructor should observe for a one-sided arc or possible deviations in gait or posture as cause for this.[3]

5. Sound orientation. The trainee should learn to use sound as a means of orientation early in training. Specific training should be given in this area by utilizing constant and moving sound sources. Utilization of sound cues is a necessity when engaged in outdoor travel.[5]

6. Kinesthetic orientation. The changes in topography place a certain amount of stress on the various muscles of the body. The trainee should be aware that changes in topography can often mean a cause of caution (e.g., a down slope on the sidewalk on the side facing the street usually means that the person is in a driveway and is veering towards the street). Changes in the surface underfoot should be taken into consideration as this also can indicate change in situations or veering.

7. Movements. The instructor should strive to have the trainee move as gracefully as possible. In cases where a blind person takes slow, hesitant steps resulting in a "shuffling," the instructor should teach and encourage longer steps. This should result in a more even stride. "Jerky," convulsive movements should also be avoided and in such cases relaxation may have to be taught or brought about through a gain in confidence. In using the cane, the trainee should avoid checking and re-checking the same piece of terrain or obstacle; this is an inefficient use of time and energy. A careful sweep of the cane once or twice is sufficient to provide the needed information.

8. Passing obstacles. When making contact with obstacles on the sidewalk, an attempt should be made always to pass the object on the side away from the street. This, too, should be done with a minimum of motion as described above.

9. Emotional control. The degree of emotional control can often be

determined when a person is confronted with an unexpected situation or when he makes a mistake. The trainee should be trained not to panic, nor move impulsively, but rather pause, attempt to identify and utilize sound cues, check terrain by sweeping the cane and arrive at a decision. The decision should be made within a reasonable length of time as too great deliberation or a stationary position may be cause for danger.

10. Automobile entry and exit. Once an automobile has been located by the trainee, he should find lower line of window and use the center post or dividing line of windows to locate the door handle. The trainee should move his hand downward from the center post or dividing line to the handle which is usually three to four inches down. He should then open the door with his right hand, placing his left hand on the roof line of the car. He should turn his back to the seat of the car, sit, and then swing his legs in. The hand on the roof line should remain there until contact is made with the seat. This prevents the possibility of hitting his head. The cane should be brought in last and held either against shoulder with the tip and the shaft between legs, or placed on the floor of the car. On exiting, the trainee should open the door gently and place the tip of the cane on the ground before leaving the car. The trainee should always inquire whether everyone is in or out before closing the door on entry or exit.

E. Outdoor Phase II

1. Following shoreline. A shoreline can be a grass edge, sidewalk edge, curb, wall or fence. It can be used in maintaining or locating a straight direction or for locating intersecting sidewalks or driveways. To follow a shoreline, the basic touch technique is altered on the side nearest the grass edge. The trainee stands near the edge (about one-half step away) and each time the cane returns to this edge the following methods can be used: (a) touch the tip of the

cane on the grass each time the cane returns to the grass side; (b) touch and glide the tip of the cane over the surface until it meets the grass edge; (c) three-point touch technique--the cane touches on the left, touches and sweeps or glides to the right edge and is picked up from 5 to 10 inches and placed on grass, walks or over curb, then it swings back over to the left and this process is repeated until the cane locates opening, step or intersecting walk.

2. Taking directions. A line of direction can be found by locating the straight edge of the shoreline with the cane. The tip of the cane rests against the edge, the arm is held outstretched and the foot is placed either alongside the edge or half-on-and-half-off, with the shoreline running straight under the foot, from heel to toe. Sometimes the foot is turned out slightly and, as it is wider in front than at the heel, this could cause a person to line up incorrectly. This can be remedied by reminding the trainee to step out to the side with his heel pulling out, instead of the tip of the foot. As soon as a straight line or direction is identified the trainee should side-step, directly to the side, away from the edge.

3. Detecting curbs. The cane should locate the curb edge, with the tip of the cane dropping over the edge about one and one-half steps ahead of the trainee, giving him enough time to react gracefully and come to a stop, keeping good balance.

4. Lining up with curb edge. Lining up with the curb is necessary for straight street crossings. On approaching the curb, the tip of the cane should detect the change in levels and pick up edge of the curb about one and one-half steps before the foot reaches the edge. The cane should be brought back and locked against the curb and centered in front of the body. Then the trainee should walk up to the cane. On a square curb, the toes of both feet should be brought up to edge. To identify a square curb, the cane should be extended to

the right with the right hand brushing the edge of the curb, switched to left hand and extended left, brushing the curb. The trunk should remain in a fixed, straight ahead position so that direction already assumed in walking up to the curb will not be lost. At a square curb, the trainee will find a straight edge under the foot or a straight edge that falls radically behind him at nearly a right angle either to the left or right.

A round curb can be identified by the same brushing motion of the tip of the cane along the curb edge. At a round curb, the trainee will feel a curve underfoot or a rather straight edge curving away behind the person slightly to the right or left. The toes of the feet should be brought up to the edge and, in order to assume a straight ahead direction for the crossing, the front portion of the foot nearest the side street should be extended over the curb with the other foot remaining on the curb. This will compensate for the angle underfoot. When a good line of direction is achieved, the trainee should hold the cane diagonally across his body with the tip against the curb until he has the correct sound cues for crossing.

5. Turning corners. A trainee must be able to turn accurate 45° and 90° turns in order to make straight street crossings or to locate intersecting sidewalks. If approaching the end of a block and wanting to make a left turn to cross the side street, the person would walk up to the curb, step straight back one or two steps and make a 45° turn or a 90° turn to the left and bring himself up to other curb. To find an intersecting sidewalk at the end of a block, the trainee should walk up to the curb edge, turn about face or 90° and use one of the trailing methods to follow grass edge or shoreline until sidewalk is located.

6. Clearing curbs. After making a street crossing, the cane should locate the curb on the opposite side one step before the foot reaches it. The cane should be picked up, placed on the walk and swept in an arc across the front of

the body and, if the area is clear of obstacles, the trainee should continue. It is important to step up on the curb as soon as possible, and the trainee should make the sweeping and stepping up one continuous motion. If crossing has not been straight and the trainee has veered to the inside edge, he will find the grass or gravel area; he should step up and out of the street after sweeping area for protection and continue into sidewalk. Then, making use of the grass edges, he can re-orient himself. If he veers to the outside of the curb and heads into the side street, the first clue that this has happened should make him turn directly into sidewalk and corner. Usually a good 45° turn will bring him directly into corner and curb.

7. Ability to determine relationships of street and sidewalk. This is especially important when a mistake is made in crossing a street. If the trainee has veered slightly to the right or left he should be able to detect his position with the intended location of the sidewalk. He should be able to use traffic sounds, grass edges, sewer openings, the slope or berm of a paved street and parked cars as clues and should be able to straighten himself out. If he feels that he should have reached the opposite curb and has, instead, veered out into the intersecting street, he should make a definite right-angle turn to bring himself back into curb. On finding the curb and locating the sidewalk, he should be able to re-orient himself to his intended direction or position.

8. Understanding traffic patterns and flow. The mobile blind person must be able to detect the sound pattern of streets with stop lights, streets with four-way stop signs, two-way stop signs and no signs. His best cue to cross at a four-way stop or at a street with lights is to begin when the car on the side street nearest him, either to his right or left, starts out from the corner. If he arrives at the curb in the middle of a traffic flow he should wait for a change of lights, then begin as the first car on the side street begins. He

should not attempt a street crossing by himself when a large sound is masking the necessary sound cues coming from the moving cars.

9. Walking with cane in crowded areas. When walking in downtown areas or on crowded sidewalks, the hand should grip the cane about 4" farther down the shaft than normal. This should prevent any problems of tripping other pedestrians or catching them on the heels with the cane.

10. Ability to follow instructions. To travel competently and safely, a trainee must be able to retain and use verbal instructions and directions. He must develop landmarks and sound cues in his surrounding environment and on routes used often in order to remain well oriented. He must also learn to ask concise questions about location and direction in order to receive correct and usable answers.

11. Understanding relationships of streets. In order to travel safely and remain well oriented, a blind person must be able to visualize or understand the relationship of parallel or intersecting streets, city blocks, main arteries of travel and the direction of the same. Tracing street markings on a map, using raised-line drawings or braille maps, should help in clarifying important relationships and ideas.

12. Utilizing help. A blind person must be able to accept or reject help from the public and, when necessary, secure help from passersby. He should also be able to make use of good "sighted-guide" techniques (i.e., he should not let someone take him by the arm when crossing a street).

13. Orientation and travel by public transportation. In order to travel independently to any great extent, the blind person should be oriented to the interior construction of buses and rapid transit trains (i.e., location and position of seats, railings, and doors). He should understand the physical layout of bus stops and transit stations. To locate the correct bus, the trainee should

ask other persons nearby or the driver before stepping on. The indoor cross-body cane technique is used to enter the bus and keeping the cane in the left hand will facilitate the paying of fare and keeping a secure grip on successive railings. With the cane in the left hand, held in a diagonal cross body position, the steps are ascended while holding the railing with the right hand. This railing continues up to the fare box and here the left hand can reach out for the pole behind the driver's seat. To locate a seat, the cross-body technique is utilized while holding on to the overhead rail with the right hand, letting tip of the cane follow on floor along edge of seat and walking slowly toward the back of the bus until an empty seat is found. The most favorable seat is the one located directly behind the driver or across from him, as the blind person will ask to have the driver call out his destination. The reverse is true for leaving the bus, with the blind person being careful to check for the location of the curb before stepping off of the last step of the bus.

* * *

As it can easily be seen, the above outline represents a rather comprehensive and exacting orientation and mobility "curriculum" to be mastered by the trainees. While not all clients received training in all phases here described, the magnitude of the training task, especially with the geriatric clients who frequently suffer from one or more secondary disabilities, can easily be imagined.

The various phases of training for adult and geriatric clients, as we have briefly described them, should be borne in mind when the subsequent chapters of this report are interpreted.

Programs with Children

Blind children, like the geriatric clients, should, ideally, receive all the described phases of orientation and mobility training, provided they need a given phase of training and are capable to learn it.

In fact, just as in the case of geriatric trainees, only some of the children received a thorough training in all phases. In addition to the child's need and ability to learn, the peripatologist's availability was a factor that determined the actual extent of training.

It should be remembered, however, that the needs of blind children frequently differ from those of the geriatrics. A young child, because of his tender age and immaturity, will seldom be allowed to travel as widely and as independently as blind adults or physically and mentally capable geriatric clients. Besides, most of our blind children have lost their vision at birth, while most of the geriatric clients are adventitiously blind. Therefore, children may completely lack the ability to visualize,an ability which was more or less retained by the adventitiously blind geriatric clients. On the other hand, few children suffer from secondary disabilities and their energy level is usually much higher than that of even the most energetic geriatric clients (although this is not universally true).[6]

Since there is a wide range of abilities among the blind children (due, undoubtedly, to hereditary factors, but even more so to environmental factors), the orientation and mobility training of blind children starts and ends at different levels, depending on the actual need and ability of a blind child and on the availability of the mobility instructor.

Special Emphases in Training

The following were recognized as the areas which needed special emphasis in the orientation and mobility training of the blind children who participated in this demonstration project:

A. Body awareness

B. Body movements

C. Spatial relationships, sizes and shapes

D. Posture and gait, and

E. Traffic concepts.

A. Body Awareness

1. The child should have an accurate idea of his body height and weight, and of his somatotype in general. The child should know this to be aware of his body's limitations and capabilities.

2. The child should understand the relationship of one part of the body to the next--hands hang below the waist, legs below trunk, etc. The child should be able to identify right from left, front from back and touch any part of the body on command. The child should be able to point in any given direction and identify where hand is in relation to head or body.

B. Body Movements

1. Because of certain emotional factors (fear of stepping off of something, fear of running into something, concern of appearance, etc.), the child may develop at an early age poor walking habits which not only may inhibit his mobility at a later date, but also result in an undesirable appearance. It is important, therefore, to correct any such habits at an early age or, when

possible, prevent them from developing. The child should be encouraged to walk as smoothly and gracefully as possible. His pattern of walking should approximate what is generally considered an acceptable gait. To encourage this and eliminate the fear factor, the child should be taught the proper protective techniques. Good movement is often dependent upon body awareness and, therefore, body awareness as described in section A (above) should be a prerequisite.

C. Spatial Relationships, Sizes and Shapes

The child should understand that objects in our environment are not in a formless state but exist in a definitive shape. He should learn and readily identify the more common shapes: the square, the rectangle, the triangle and the cylinder. Sophisticated material is not necessary for this, common objects found in the home or school can be used, such as books, window panes, desks, etc. It may be pointed out that if more sophisticated material is desired, the Mitchell Kit sold by The American Printing House is very useful.

It is important that the child learn to make judgments concerning size, not specifically in terms of inches or feet, although this should be necessary later, but in terms of longer than, shorter than, wider than, smaller than, taller than, etc. When the child understands these concepts, the knowledge should be transferred to movement and space--this is closer to me than, I walked farther than last time, this corridor is longer than, etc.

The necessity for much of this type of training will depend upon experience, maturation, readiness, age and degree of vision. Keeping this in mind, the instructor should be prepared to move into the area of depth, height, and width, if so indicated. This should be done in reference to relationships between buildings and street, street and sidewalk, room sizes, etc.

D. Posture and Gait

Although posture is being considered separately at this point, it can and perhaps should be treated in and as part of body movements. Gait usually has a positive relationship to posture, i.e., poor posture usually results in poor gait. In view of this, the two should be treated simultaneously. The instructor should not assume that the child possesses certain knowledge, but begin on a basic level. For example, he should inquire as to what is the child's concept of correct posture and why it is important.

The instructor should concern himself initially with the over-all appearance of the child. The over-all appearance should be one of proper body alignment. Body weight is evenly distributed in an antero-posterior direction. Weight is also equally distributed over both feet and not shifted laterally. The head is tilted or turned neither to the left or right. The chin should be above and in a straight line with the sternum. The shoulders are neither exaggerated backwards nor rounded. The child should be observed closely to detect whether one shoulder is higher than the other. The hips should be horizontally even. Abdomen should be observed for muscle weakness which may lead to lordosis [forward curvature of the spine producing a hollow in the back].

The feet play an important role in over-all appearance and good posture, hence close attention should be given to this area. The toes should be pointed straight ahead; feet are not rotated internally or externally. Feet placement should be in such a manner that toes form an imaginary line which is approximately six inches anterior to collarbone.

In the congenitally blind child, the arms are often a cause for concern. Arms should be held at sides in a relaxed manner. Thumbs should be slightly anterior and close to thighs. The arms should be slightly flexed at the elbows. Gross deviations, such as scoliosis [lateral curvature of the spine], kyphosis [abnormal curvature of the spine resulting in a hump], etc., may require the help of specialists. The peripatologist should never hesitate to seek the help of other professionals in the community.

In gait, as in posture, the instructor must begin by making sure the child has an idea as to what is the average walking pattern. The following areas should be considered for evaluation and/or training:

1. When walking, the toes are pointed straight ahead with feet moving anterior to each other in an alternate pattern, right, left, right, left, etc.

2. In moving the feet alternately, one foot is placed approximately four to six inches laterally to the other and ten to fourteen inches (from heel to heel) forward to the other. Length of leg and general size of child is considered and allowances made for individual differences.

3. When walking, arms are relaxed at sides (except when in protective position) and motion of body should induce slight movement in arms.

4. The weight of the body (when walking) is first placed on the heel of the forward foot and transferred to the toes when the opposite foot is moving forward.

5. Over-all body alignment and correct posture, as previously described, is maintained.

E. Traffic Concepts

1. It is important that the child is made thoroughly familiar with his own immediate environment. This may mean his own yard, his own street, or his whole neighborhood.

2. The child is given a clear concept of street intersections.

3. The child should understand the flow of traffic patterns and understand what is meant by streets "running" north and south, etc., one-way streets, alley, etc.

4. The child should understand and be familiar with traffic lights, why and how they operate.

5. If the child lives in a rural area he should understand that traffic will move on the right side of the road and that he should walk facing the traffic.

Depending upon age and ability, the child should now be ready for formalized travel training which, in general, follows the outline of the "curriculum" for the adult and geriatric blind, Phases A to E, inclusive, which have already been briefly outlined in this chapter.

School-Based Programs

There was a very acute need for orientation and mobility training of blind school children, as many blind pupils were completely dependent on other persons not only for their travel to and from school, but also for moving from class to class, and even for movement within the classroom. Several blind children were completely left out of the organized and spontaneous play activities at their school and their social participation was limited--situations which have at times very adversely affected their personality development.

While some blind children participated in the structured and non-structured school activities to a greater extent (depending on their ability and motivation, on school policies and on the attitudes of the sighted pupils), even here the peripatologists could hardly be optimistic, as they concluded in a preliminary report, written in Spring, 1965:

> From our observation of the children's progress during their play at games, performance of exercises and tests of strength, speed, ability and balance, it became quite evident that the majority of these blind children have not had sufficient experience or instruction in these body skills which are the essential prerequisites for the most basic instruction in travel. It was found that most of these children were not ready, physically or emotionally, to accept the

responsibility of traveling about the school or to-and-from school by themselves. In most instances, it was necessary to provide training in body awareness and in basic physical skills--standing, walking, running, stopping, etc.

The instruction in the basic physical skills was provided, whenever possible, on the group basis, while the training in travel techniques was generally done with individual clients. Group instruction generally took place at the respective school building or, in some instances, at the Society's Sight Center. The individual instruction usually included both the inside and the outside of the school building, as well as child's home and his immediate neighborhood, with occasional trips to various business areas and rides on public transportation.

Although children's orientation and mobility training in this demonstration project was mainly school-based and constant contacts were maintained with the appropriate representatives of the school (child's teachers, counselors, principals, etc.), the peripatologists also made an effort to establish a working rapport with every client's parents. This, it was hoped, would help the parents to better understand the orientation and mobility problems, as well as various behavior problems, of their blind children and, at the same time, would also enable the peripatologists to gain greater insight into the web of influences to which their young charges were exposed.

Special Summer Programs

In addition to campings at the Society's Highbrook Lodge which concentrated on a child's over-all physical and emotional development, special programs for the juvenile orientation and mobility clients were organized each summer.

During the summers of 1965 and 1966, the main emphasis was on physical exercises and conditioning to improve the physical condition of the physically underdeveloped clients.

During the summer of 1967, a selected group of children received sensory training, activities in daily living training, mobility, physical education and exercises, and table manners training.

Work with an Adolescent Schizophrenic Client

Of special interest was orientation and mobility training with a blind adolescent girl who was emotionally very disturbed and repeatedly hospitalized in a mental hospital. During her first psychiatric hospitalization, she could not find her way around the building and the Society was invited to provide the needed orientation and mobility training. Mr. Auzenne repeatedly visited the hospital and tried to teach the client the needed mobility skills, but he had almost no success. Then it was decided that he would train another psychiatric patient acceptable to the mobility trainee to act as the adolescent blind girl's mobility instructor. With this new "teacher," the client quickly learned mobility in and around the hospital and the process proved therapeutic for both patients. (See the case history of Ann in Chapter 6 of this study.)

* * *

Even a brief description of programs and approaches developed or followed in this demonstration project suggests the magnitude of tasks with which the project staff was confronted. The project required many exploratory approaches and a considerable amount of ingenuity, resourcefulness and patience of the peripatologists who faced the difficult task of teaching orientation and mobility skills to a large number of trainees, many of whom lacked the essential prerequisites for successful learning or suffered from physical, mental and/or emotional handicaps which made such learning extremely difficult and slow.

FOOTNOTES

1. The Research Department of the Cleveland Welfare Federation graciously provided a number of pamphlets which greatly facilitated this work. The Cleveland Society for the Blind gratefully acknowledges the many valuable services provided by the Cleveland Welfare Federation.

2. The Montefiore Home, located in Cleveland Heights, Ohio, is a Red Feather agency. On June 30, 1964, there were 231 residents at the Home, including 40 for day care only. Out of this total, 29 were reported as emotionally and mentally confused. The home provides medical and psychiatric care, social services, workshop, physical therapy, occupational therapy and group work. See Montefiore Home Annual Report, 1963-1964, Cleveland Heights, Ohio: Montefiore Home, 1964.

3. For an excellent treatment of this subject, consult Bryant J. Cratty, Perceptual Thresholds of Non-Visual Locomotion, Los Angeles: University of California, August, 1965.

4. Cf. Paul Zahl, Blindness: Modern Approaches to Human Environment, New York: Hafner Publishing Co., 1962; Industrial Home for the Blind, Instruction in Physical Orientation and Foot Travel, New York: Industrial Home for the Blind, 1950; D. R. Griffin, Listening in the Dark, New Haven, Conn.: Yale University Press, 1958; Charles E. Buell, Motor Performance of Visually Handicapped, Ann Arbor, Mich.: Edwards Brothers, 1950; Bryant J. Cratty, Movement Behavior and Motor Learning, Philadelphia: Lea and Febiger, 1964.

5. Cf. Winthrop N. Kellog, "Sonar Systems of the Blind," Research Bulletin (American Foundation for the Blind), January, 1964, pp. 55-69. See also Fay-Tyler Norton, Improving and Accelerating the Process of Raising the Hearing of Blinded Persons to a Greater Degree of Usefulness, Cleveland, Ohio: The Cleveland Society for the Blind, 1960.

6. Cf. A. T. Welford, Aging and Human Skill, New York: Oxford University Press, 1958.

5. CLIENT STATISTICS

According to the available records, 189 clients received orientation and mobility training. It is probable that, due to changes in personnel (peripatologists as well as researchers), the records may be incomplete and the above number may be an underestimate.

Sixty-two clients, or roughly one-third of the entire project population, were juveniles; 127 clients, representing roughly two-thirds of the population, were geriatrics.

We shall first present the statistics on the juvenile clients.

In Table 1, frequency and percentage distributions of the juvenile clients are shown by age and sex. The 13-year-olds represent the mode, as well as the mean and median age for the juvenile group.

In Table 2, distribution by race, and in Table 3, distribution by religion is shown.

In Table 4, age at the onset of blindness is indicated. Slightly over 80 per cent of the juvenile clients suffered from congenital blindness and most of the remainder became blind soon after birth. The legal definition of blindness is used,[1] however, which allows for a very limited amount of residual vision. As a rule, this limited residual vision deteriorated or was completely lost in most juvenile clients.

Table 1. Frequency and Percentage Distribution of Juvenile Clients by Age and Sex

Age	Male f	Male %	Female f	Female %	Total f	Total %
7	1	3.33	1	3.13	2	3.23
8	1	3.33	3	9.38	4	6.45
9	1	3.33	1	3.13	2	3.23
10	1	3.33	2	6.25	3	4.84
11	3	10.00	1	3.13	4	6.45
12	1	3.33	6	18.75	7	11.29
13	6	20.00	6	18.75	12	19.35
14	7	23.33	3	9.38	10	16.13
15	3	10.00	1	3.13	4	6.45
16	1	3.33	4	12.50	5	8.06
17	-	----	3	9.38	3	4.84
18	1	3.33	-	----	1	1.61
19	1	3.33	-	----	1	1.61
20	1	3.33	1	3.13	2	3.23
No data	2	6.67	-	----	2	3.23
Total	30		32		62	

Table 2. Frequency and Percentage Distribution of Juvenile Clients by Race

Race	Frequency	Percentage
White	50	80.65
Colored	7	11.29
No data	5	8.06
Total	62	100.00

Table 3. Frequency and Percentage Distribution of Juvenile Clients by Religion

Religion	Frequency	Percentage
Catholic	32	51.61
Protestant	23	37.10
Jewish	1	1.61
Other	1	1.61
No data	5	8.06
Total	62	99.99

Table 4. Frequency and Percentage Distribution of Juvenile Clients by Age at Onset of Blindness

Age at onset	Frequency	Percentage
Birth	50	80.65
3 months	1	1.61
2 years	1	1.61
3 years	1	1.61
5 years	1	1.61
10 years	1	1.61
No data	7	11.29
Total	62	99.99

In Table 5, sex and age distribution of the geriatric orientation and mobility clients is shown. The highest frequency is found in the 75-80 age interval, namely, 27 clients or somewhat over 21 per cent of the entire geriatric project population. The mean age of the geriatric clients is 72 years and the median age is 73 years.

In Table 6, we present the frequency and percentage distribution by race, and in Table 7, by religion. In Table 8, the distribution by marital status is shown.

Table 5. Frequency and Percentage Distribution of Geriatric Clients by Sex and Age

Age	Male		Female		Total	
	f	%	f	%	f	%
To 54	2	3.28	3	4.55	5	3.94
55 - 59	2	3.28	2	3.03	4	3.15
60 - 64	5	8.20	8	12.12	13	10.24
65 - 69	11	18.03	6	9.09	17	13.36
70 - 74	8	13.11	13	19.70	21	16.54
75 - 80	13	21.31	14	21.21	27	21.26
81 - 84	5	8.20	6	9.09	11	8.66
85 - 89	1	1.64	5	7.58	6	4.72
90 - 95	3	4.92	3	4.55	6	4.72
No data	11	18.03	6	9.09	17	13.39
Total	61		66		127	

Table 6. Frequency and Percentage Distribution of Geriatric Clients by Race

Race	Frequency	Percentage
White	68	53.54
Colored	42	33.07
No data	17	13.39
Total	127	100.00

Table 7. Frequency and Percentage Distribution of Geriatric Clients by Religion

Religion	Frequency	Percentage
Protestant	72	56.69
Catholic	20	15.75
Jewish	6	4.72
Other	5	3.94
No data	24	18.90
Total	127	100.00

Table 8. Frequency and Percentage Distribution of Geriatric Clients by Marital Status

Marital Status	Frequency	Percentage
Married	48	37.80
Widowed	34	26.77
Single	14	11.02
Divorced	4	3.15
No data	27	21.26
Total	127	100.00

Causes of blindness could be reliably established for 98 out of 127 clients and are presented in Table 9. Chronic glaucoma was by far the most frequent cause, with optic atrophy, diabetic retinopathy and cataracts following in that order.

In Table 10, duration of blindness is indicated by ten-year intervals. Over 57 per cent of the geriatric clients were blind less than ten years and another 27 per cent longer than ten years but less than 20 years or, cumulatively, somewhat more than 84 per cent of all geriatric clients were blind less than 20 years.

Five clients, or 5.61 per cent, were congenitally blind. For 38 clients no reliable information could be obtained.

Table 9. Frequency and Percentage Distribution of Geriatric Clients by Causes of Blindness

Cause of Blindness	Frequency	Percentage
Chronic glaucoma	27	27.55
Optic atrophy	16	16.33
Diabetic retinopathy	13	13.27
Cataracts	13	13.27
Retinal detachment	10	10.20
Macular degeneration	9	9.18
Retinal degeneration	3	3.06
Enucleation	2	2.04
Trachoma	1	1.02
Retinitis pigmentosa	1	1.02
Corneal dystrophy	1	1.02
Scarlet fever	1	1.02
Healed interstitial keratitis	1	1.02
Total	98	100.00

The records of 40 clients, or 31.50 per cent of the total geriatric group, indicate some secondary handicaps in addition to blindness. Since it is quite possible that these secondary disabilities were not always noticed, reported or recorded, the existing number is probably an underestimate. Inasmuch as the records show, by far the most frequent secondary disability is diabetes which accounts for 42.50 per cent of all recorded secondary handicaps. Heart ailment

Table 10. Frequency and Percentage Distribution of Geriatric Clients by Duration of Blindness

Duration of blindness	Frequency	Percentage
To 10	51	57.30
11 - 20	24	26.97
21 - 30	4	4.49
31 - 40	1	1.12
41 - 50	2	2.25
61 - 70	4	4.49
Over 70	3	3.37
Total	89	99.99

and the loss of hearing follow, each representing 12.50 of all recorded secondary disabilities. Frequency and percentage distribution of the 40 secondary disabilities are shown in Table 11.

Table 11. Frequency and Percentage Distribution of Geriatric Clients by Their Secondary Disabilities

Secondary disability	Frequency	Percentage
Diabetes	17	42.50
Heart ailment	5	12.50
Loss of hearing	5	12.50
Obesity	2	5.00
Infirmity	2	5.00
Arthritis	2	5.00
Neuropathy	2	5.00
Asthma	1	2.50
Hypertension	1	2.50
Bladder disorder	1	2.50
Fatigue	1	2.50
Arteriosclerosis	1	2.50
Total	40	100.00

While all geriatric clients are either retired or housewives at the present time, roughly 61 per cent come from the working class. Thirty-two per cent could be classified as having belonged to the lower-middle class occupations (sales clerks, draftsmen, skilled craftsmen, etc.), and seven per cent to the upper-middle-class category (big businessmen, professionals, etc.).

Unfortunately, the frequencies of the orientation and mobility lessons were not always properly recorded and, due to the changes of personnel, it was impossible to locate some "personal" records. Many existing records show frequencies in the 30's and higher. The breakdown of available information shows, however, that there was a significant difference in the number of lessons given to the juvenile group and to the geriatric group. Among the juveniles, most clients (70.37 per cent) received more than ten lessons each; among the geriatrics, only 22.22 per cent of the clients received more than ten lessons. Over 20 per cent of juveniles and 30 per cent of the geriatric clients received between five and ten lessons; and less than ten per cent of the juveniles, but 48 per cent of the geriatric clients, received less than five lessons each.

These differences seem to suggest that the majority of the geriatric clients have limited, point-to-point mobility needs and this limited mobility can be learned (if at all) in less than ten lessons. Juveniles, on the other hand, must be taught to become safe and efficient travelers everywhere -- inside the buildings and outside, in their own neighborhoods as well as in shopping centers or in the downtown area. Such learning, of course, requires a much more extensive and intensive orientation and mobility training.

FOOTNOTES

1. "... the legal definition of blindness covers persons who can read briefly by holding the paper close to their eyes but, with so impaired vision, cannot do work requiring sight." See Juliet Bindt, A Handbook for the Blind, New York: The Macmillan Company, 1952, p. 197.

6. CASE HISTORIES

Ever since the 1830's when Frederic Le Play developed the case-study method, case histories have remained a highly useful research technique. They give us a vivid illustration of the interaction process, enable us to get a deeper insight into the complexities of various types of interaction and the resulting personality developments, and serve as a source of hypotheses to be tested, usually by other methods.

In this chapter, we examine seven case histories which illustrate the project's approaches, successes and failures. As the writer was dependent on unevenly written records and on limited oral interviews, and as some cases are considerably more complex than others, variety, rather than uniformity, will characterize this presentation.

The author's interpretation of these case materials is presented partly in this chapter and partly in the subsequent evaluation of the project.

Overcoming Resistance to Learn Mobility in an Adolescent Blind Schizophrenic Client: The Role of the "In-between"

The case of Ann is of great interest, as she failed to learn mobility when taught by a peripatologist, but made rapid and remarkable progress only a few days later when the orientation and mobility training was given her by a sighted fellow-patient in the same mental hospital. The second, equally interesting finding is that the instructional process proved therapeutic also for Ann's patient-instructor.

To understand Ann and her learning problems and successes, we must briefly review her entire case history.

Ann was born in 1947 in Europe. She was still a baby when her family immigrated to the United States. Her father died of a brain tumor when she was twelve years old. Since then, her mother has been on Social Security and has also worked as a cleaning lady. It seems that the family has struggled through many financial difficulties, as, according to mother's report, only $70 per month remained for food, medicine, clothing and other necessities for the mother and her three children after the fixed expenses had been met. The mother must have felt this economic and social deprivation much more acutely than those persons who have never known anything but poverty, as she had been a teacher and an Olympic champion in her Eastern European native land prior to her immigration to America.[1]

Ann's blindness is due to optic atrophy in both eyes. She has been blind since birth, although her family, for a number of years, continued to hope that her vision would improve or that a low-vision aid might be found for her which would help her to see at least to some extent. In addition to her blindness, Ann is also excessively obese and, as the record indicates, has been emotionally disturbed at least since 1962 or since she was 15 years old.

It was in 1962 that Ann started to complain bitterly about her mother who, supposedly, was unfair to her, failed to understand her and was "involved in an illegal affair with a married man." Ann's "proof" for this affair was that the suspected man never answered the telephone when her mother was away from home.

Ann was briefly hospitalized in the children's psychiatric ward of a general hospital in 1962, mainly for diagnostic purposes. The professional opinion at that time was that both mother and daughter could benefit from the Youth Services and that, basically, only a better and warmer interpersonal relationship was needed. Unfortunately, the mother was either unable or unwilling to avail herself of the available Youth Services and Ann's emotional condition, instead of improving, deteriorated in the subsequent years.

The core of the problem seemed to be an extremely unsatisfactory relationship between the client and her mother. Several reports suggest that Ann's mother has been overprotective. She vainly tried to win Ann's affection by doing for her and giving her everything that she wanted.[2] At the same time, the mother seemed to be somewhat ashamed of Ann. She seldom took Ann to church or other such places where her acquaintances might see her with her blind and obese daughter.[3] Occasionally, at least, Ann's appearance suggested mental retardation, but this could not have been due to any lack of intelligence, as her grades were superior, but simply to the development of bad habits and to her emotional disturbance due, in turn, to poor interaction at home.[4]

There was intense sibling rivalry in the family.[5] It seems that Ann perceived herself as being physically and socially disadvantaged, rejected by both her mother and her playmates and, later, by schoolmates who "made fun of her because of her blindness and obesity." Ann reciprocated with suspicion, resentment, and withdrawal, both physical as well as psychological (daydreaming and enjoyment of crime, mystery and divorce cases on the radio, TV, and in the reading materials).[6] Her drifting away from reality was also reflected in her occupational aspirations where she at first wanted to become either an opera singer or an actress, although she later settled for the job of a police switchboard operator or secretary, and still later for that of a Braille teacher.[7] None of these aspirations have been realized so far and the client, in reality, only progressed enough to work in the Society's Industrial Division in 1966 and as a telephone solicitor early in 1967.

Ann has long been preoccupied with sex, and this in succession of fantasies, anxiety-loaded projections and, more recently, physical explorations.[8] In 1962, at the age of 15, she told the caseworker of her first sexual experience at the age of eleven. At that time, she was approached by a man in the school corridor who told her that he was the principal and asked her to accompany him to the basement. There, according to Ann, "he tried but did not succeed." Older records suggest that this incident may have indeed happened as told. Now, however, Ann was abnormally preoccupied with sex. Boys were always making sexual suggestions to her. Her mother had an "illegal affair" with a married man. Ann spoke to the caseworker in whispers about her need for privacy in the camp where, at first, she did not want to go for fear of being sexually molested. She whispered because of the danger of spies.

Much of this preoccupation in 1962 seemed to have been of a projective nature, as Ann's developing sexual drives were being repressed and then projected on her environment.[9] But by 1963, when the client was at a state school for the blind in another city, reports reached the Society that she made several propositions to other girls in the dormitory, i.e., she externalized her sexual drives and directed them toward the then available love objects.

Her severe maladjustment in the family where Ann's hatred toward her mother increased so much that she began threatening that she would kill either her mother or herself, her intense sibling rivalries where she once tried to punish her baby brother by twisting his arm (whereupon she called the police assuming that she broke it, which was not the case), her inability to get along with other young people who were perceived as constantly making fun of her because of her blindness and obesity, and her sexual suspicions and explorations led to her confinement in a mental hospital in 1964 where she remained for a period of a year and a half. She was diagnosed as Schizophrenic Reaction, Paranoid Type.

At the request of hospital administration, the client was contacted by Society's peripatologist who tried to teach her the essentials of orientation and mobility, so that she could get to various places in and around the hospital without constantly depending on a human guide. Practically no progress was made and a conference was held. There a suggestion was made to experiment with an appropriate woman patient who could be trained how to teach Ann the essentials of orientation and mobility. This was done and the two patients immediately established a good rapport. Ann showed no resistance toward her new instructor and the patient-instructor assumed her role with utmost seriousness and devotion. Ann soon learned to get around on her own and her over-all anxiety visibly decreased. In fact, she repeatedly offered to show around the hospital various new patients and sighted visitors.

After Ann's dismissal from the hospital in fall of 1965, she called the Society to get outside mobility training in her own neighborhood and on public transportation. The same male peripatologist now took over, with considerably greater success than on his first direct attempt at the hospital. Ann was eager to learn mobility, although she at first displayed a lack of confidence in herself which slightly slowed down her learning process. Her attitude toward men was in process of change which may account for her greater acceptance of the male peripatologist.

In 1965, Ann was also enrolled by the Cleveland Society for the Blind in its Multiple Disability Project where, at first, she preferred to depend on taxi service for transportation. As the Society objected and offered more mobility training and, perhaps more so, as her desire to get around to various places unaccompanied increased, Ann managed to overcome her anxiety and her lack of confidence in herself and soon became a good independent traveler.

At this time (age 17), Ann has also become increasingly interested in men. She began making frequent telephone calls to various male clients on the same project and her conversations were openly suggestive. A male client reported that Ann used language about sex which he was too embarrassed to repeat. By Christmas, 1966, Ann began roaming the streets on her own in the evenings and was at least once seen meeting a man in a questionable way, although she had told her mother that she was going to a club meeting which, in fact, was not held that evening.

While a multiple disability client (obesity and emotional maladjustment were considered as her secondary disabilities), Ann was given a number of tests. The psychologist's interpretation of the California Test of Personality (Intermediate, Form AA) is of special interest:

> The impression of this individual which we might obtain from these results is of someone who perhaps thinks of herself as being independent and self-reliant -- who may feel she does not need other people. Such an appraisal would probably be a rationalization based on what she might see as rejection of herself by others -- a feeling supported by an apparent low self-esteem relative to relations with others.[9] This may be seen in the low scores for "feeling of belonging," "withdrawal tendencies," "social skills" and "community relations." It seems likely, too, that Ann does not receive much support or real confidence at home. Apparently, she is able to establish fairly good relations at school -- a situation where she may use certain academic talents in a competitive manner.

Occupational therapy and activities-of-daily-living instructor recorded these comments with regard to Ann's participation in the Multiple Disabilities project:

> Ann is less concerned with punctuality than other clients. ... She lives in a world of fantasy, at times seeming untouched by uncomplimentary remarks, at other times hostile and retaliative in devious ways. Her excessive weight seriously impedes her ability to make an attractive appearance. ... She is very unresponsive so that it is often difficult to determine if she understands instructions. She did, however, show fair comprehension and worked with some concentration. ... She takes correction passively, but seldom repeats errors. She shows fair to good tactual perception and speed of performance. Ranked highest of girls in group on plate test. ... The quality of her workmanship is from fair to good.
>
> Ann showed complete unfamiliarity with tasks relating to homemaking. She indicated that she had never been permitted to do anything in the kitchen with the possible exception of helping wash the dishes. She has always been largely dependent on her mother for dressing, taking care of her clothes, fixing her hair, etc. She does not seem especially desirous to do these things for herself.
>
> She showed some interest in learning to cook and pride in accomplishment. She evidenced no interest in sewing and was unable to complete any project in this area. ... She exhibited real pleasure in having a part in the program to entertain staff guests and performed with considerable poise. She has a pleasant voice.

The head of the Society's pre-vocational workshop summarized his impressions in the following words:

> The client can proceed into gainful employment, if proper attention is given to her. She will not be a speedy worker but she is steady and very patient in the shop. The first goal is to get her used to a regular work schedule and her employer will find that she is accurate with mental arithmetic and the use of her hands.

Based on this conclusion, the recommendation was made that Ann be sent to the Society's Industrial Division where she started working on June 15, 1966, on a training rate of 50 cents per hour. She worked for longest periods on ribbon-cutting operation. Ann was not too happy at the Industrial Division; she especially complained about her working hours, saying that she had to get up at 5 o'clock every morning.[10] Her supervisors, too, lodged several complaints about

Ann. She was reported to be unpunctual, coming 5 to 10 minutes late on several occasions. She took off more than the allowed ten minutes for coffee breaks. She spent time in the lobby, using the public telephone there. Once she spent 35 minutes talking on the phone, during her working hours. She did not always call in when absent from work. She was also underproductive on most of the jobs.

In interpreting the above data, one should add to the factor of habit also Ann's perception of her new job and environment. While on training, Ann was anxious to become a braille teacher and, as we have seen, her earlier aspirations were even higher (opera singer and actress). Obviously, the ribbon-cutting and similar operations at 50 cents per hour must have been frustrating to Ann, given her vocational aspirations. One wonders what would have been her performance and her adjustment were she actually trained to become what she wanted to be or what would have been an acceptable substitute. Unfortunately, the Society does not yet have a Transitional Employment Workshop which could provide highly individualized training and assist with the appropriate placements. This facility is still at the proposal stage and the Society hopes that clients such as Ann may some day profit from it when the proposal is brought to fruition.

As could be expected, Ann's poor occupational adjustment was accompanied with other problems. Her relationship with the mother and the two younger siblings was tense, especially since Ann often left her home in the evening and the mother was suspicious that "something was going on."

Ann, in turn, strongly desired to get an apartment of her own. After consultation with her psychiatrist, arrangements were made for her at an establishment for single women, in late fall of 1966. This arrangement was not entirely satisfactory as other girls began to complain that Ann "was trying to take advantage of them" and the administration became concerned about Ann's absences from her apartment during the night.

Ann's employment at the Industrial Division has been increasingly irregular, partly due to her lack of motivation and partly to the lack of work.

Early in 1967, Ann became a telephone solicitor with a firm employing handicapped persons. On her new job, she met a woman who invited her to live with her. But the apartment must have been in a deplorable condition and her mother, shocked that her blind daughter should live in such a place, took her back home.

On her new job, Ann also met another woman who belonged to a sect engaged in faith healing. Ann was persuaded to bring her money to the minister who, in return, would pray for her, together with the entire congregation, "that her sight be restored." Ann brought the minister $30, or everything she had, and after the prayers were said, she experienced "visual hallucination which was religious in nature. She felt that the room she occupied was lit up with divine presence and she saw the light of religion." Due to these hallucinations, she was taken to the mental hospital and remained there from May 25, 1967, to August 4, 1967.

On August 8, 1967, Ann's caseworker at the Cleveland Society for the Blind attended a conference on Ann at the mental hospital. Ann's psychiatrist stated that, on discharge, Ann was not psychotic. He recommended that she return to the School for the Blind in order to complete her high school education. Should the school reject her, the psychiatrist recommended finding an "employment in a situation which would not require pressure."

As there was some question about Ann's homosexuality, Ann's psychiatrist also sent the caseworker a letter, dated August 11, 1967, where he stated that "during Ann's hospitalization, there have been no homosexual tendencies observed in the patient. She made satisfactory adjustment to the Intensive Treatment Unit. She could return to the School for the Blind and could be followed up in the nearest Out-Patient Clinic once a month."

At the time of this writing, no decision has yet been made on Ann's admission to the school. Currently, Ann lives with her mother and seems to be better adjusted. For the first time in years, she also reduced to an appreciable extent, losing some 50 lbs. One is afraid, of course, that, under pressure, the old conflicts and tensions may again be activated.

Ann's case teaches us that a serious emotional block between the mobility instructor and the client (even if not identified as such at the beginning) may make progress in orientation and mobility learning difficult, slow or nil. (Or, to put it in other words, when progress is abnormally slow or nil, it seems appropriate to explore whether this may be due to emotional inhibition rather than to other factors, such as a deficient intelligence.) When the emotional inhibition is removed, the same client can learn the same skills with relative ease and effectiveness, even when he or she is trained by a much less experienced -- but emotionally more acceptable -- instructor. (In the case of Ann, her instructor, too, profited therapeutically from her instructor-role, as reported by her psychiatrist.)

The case of Ann strongly suggests the desirability of "in-betweens" as orientation and mobility instructors whenever peripatologist-related emotional inhibitions hinder the client's learning.

These findings, while very important for orientation and mobility training of blind clients, undoubtedly have much broader implications.[11] They speak rather convincingly for greater experimentation with "in-betweens" who could be taught by professionals to teach those clients, patients, pupils or students who are resistant to direct instruction by the professional.

Establishing Rapport with a Blind Girl Who Thinks Life Is Not Worth Living

Maria has been blind since her birth in 1954. She was a premature baby and lost her sight as result of overexposure to oxygen. The ophthalmological report indicates the diagnosis of retrolental fibroplasia.

Maria was referred to the Cleveland Society for the Blind in March, 1961, by her mother who applied for a talking book machine. This service was provided. In June, 1961, an unsuccessful attempt was made to have the client admitted into a Girl Scout troop; Maria was at that time repeating her first grade which was never mentioned to the caseworker who thought this was Maria's first year at school. She, therefore, could not be admitted.

Older records indicate that Maria's home was first visited by a caseworker in September, 1954, when Maria was only six months old. According to the record, the family lived in a pleasant residential section in a suburb of Cleveland. The home was well furnished and exceptionally neat.

During the first visit, Maria's mother, then in her middle thirties, was neat, but quite emotionally upset. She cried quietly and found it difficult to talk. She had Maria on the living room couch, awaiting the visiting caseworker.

Maria's mother told the caseworker about her pregnancy, how much she and her husband had wanted Maria, the toxemia during her pregnancy, and the resulting Caesarian section at six months' gestation. Maria's mother was hospitalized for a month and believed that only a miracle saved her and her baby.

Maria weighed only two pounds and four ounces at the time of birth and her weight went down to one pound and 14 ounces while in the incubator. She remained in the hospital over three months.

The mother spoke about her own questioning of Maria's vision and the reaction she and her husband had when their eye doctor told them their child was blind and there was little chance that she could ever see. The parents could hardly believe this was possible and the mother cried bitterly for many weeks.

On the subsequent visits, the mother seemed to be proud of her baby and yet she had not accepted her blindness at all. She was frequently tired and tense and some of this, obviously, was due to Maria's crying at night.

Mother liked to talk of the difference in her life since Maria arrived. Now she was always busy and tired. Of course, she loved the baby, but she was the one who had most of the care. Earlier, her husband always had a kiss for her when he returned home from the factory where he worked as a machine repairman, but now his first interest was in the baby. Quite frequently, there has been a negative feeling expressed about men in general and husbands in particular. The mother mentioned her older sister, Josephine, who was unmarried and a librarian. Josephine was also interested in Maria and she had "read up" on blindness.

Since January, 1955, the mother has appeared to be feeling better physically and to have made some progress in adjusting to Maria's blindness. She was quite talkative with the caseworker, saying that her husband was a quiet man and seldom said much of anything, so she really welcomed an opportunity to chat. The worker's own impression of Maria's father was that of a "quiet, mild sort of individual, interested in casework and showing a nice attitude toward Maria, but seeming to feel that all this talk was between his wife and the worker."

There has been a change in the mother's attitude toward Maria, as she spoke glowingly and proudly of her progress -- from the use of her toys, to sitting up, her activity in the play pen, pulling herself up and jumping up and down. She described Maria as such a good, happy baby.

Throughout 1955, mother continued to be proud of Maria, but she continued to hope that her child eventually would have vision. Maria's progress, apparently, encouraged mother's wishful thinking, for "an almost perfect baby" really needed nothing but vision and then everything would be just perfect.

In August, 1955, mother received an excerpt from an Arizona newspaper, stating that a certain doctor there has used the drug calsulfydral with the retrolental fibroplasia patients and vision has resulted. Mother was hysterical with joy, crying that she "just knew that something like this would happen." She made plans to take Maria to the Arizona doctor, as soon as she could get an appointment. Her husband spoke to her in a kindly fashion, pointing out this could just be publicity and she should not get her hopes too high. Soon afterwards, a local doctor gave a lecture which mother attended. He pointed out that the mentioned drug not only was useless, but could actually be dangerous. Mother accepted this, with disappointment, saying that she "has learned her lesson."

There is an unfortunate gap in Maria's record between 1955 and 1959, the very important years of the child's socialization. Apparently, little or no casework was done during this time.

In 1959, Maria was described as "a very friendly youngster who seemed a little frail and who repeated a great deal of what was said to her." Maria's mother said of herself that she was "the nervous type" and often suffered with migraine headaches.

When the caseworker wanted to discuss Maria's blindness, the mother was quite defensive and said that this topic made her nervous. In discussing what Maria could do for herself, mother pointed out that one of her main problems was dressing herself and observing proper table manners. Maria preferred to eat with her hands and refused using spoon and forks.

The worker observed on the record that Maria did not impress her as a slow learner; she was probably merely reacting to the tenseness in her mother.

In September, 1959, Maria started attending a Presbyterian nursery school and then "graduated" to a Catholic kindergarten where she was put into a class of 85 youngsters. She seemed to enjoy this experience and did very well, although she sometimes missed classes because of her frail health.

In June, 1960, the School Board psychologist evaluated Maria and recommended her admission to a public elementary school. Here, however, Maria had a very hard time adjusting. She complained of being tired all the time and the school days seemed to be far too long for her. She had to get up before 7 A.M. and did not return home before 3 P.M. The driving distance to the school was one hour. It is possible, however, that the unfavorably perceived social atmosphere was just as much or much more important than other factors.

The record indicates that Maria had trouble learning Braille. Two factors seem to have been responsible for this. First, Maria's aunt Josephine knew Braille and she taught her her own method of Braille, as Maria visited with her on week ends. The school Braille teacher claimed that Maria was always more difficult on Mondays, but improved somewhat by Fridays. Secondly, there obviously was a very poor rapport between the school braille teacher and Maria, as the latter often came home crying, reporting that the teacher was very hard on her and frequently struck her hand while teaching her Braille. Mother finally reported to the school counselor that the Braille teacher was probably too firm with Maria. The Braille teacher retorted that the mother was too lenient with the child and one should never give in. The principal and the teacher also tended to blame aunt Josephine's meddling. Maria, in the meanwhile, seemed to be torn between these conflicting pulls and pushes.

Maria later received two younger brothers. Unfortunately, her relationship with them was not sufficiently observed by the caseworkers. We learn, however, that "it was evident that Maria received much more attention than her brothers."

Maria failed the first grade and she continued to be a relatively poor student, although she managed to pass the subsequent grades.

During the summer of 1963, she attended the Society's Highbrook Lodge camping program. She was "slowly but surely oriented into the camp life at Highbrook Lodge. She was very slow in all of her activities, but showed interest and determination to improve. By the end of the week, she was able to travel independently from place to place. She interacted with other campers and revealed no symptoms of homesickness. She verbalized her enjoyment of being at the camp and stated she was ready to return next summer."

During summer, 1964, Maria attended a two-week session at a Congregational Vacation Bible School. She came home each day all excited over the warm welcome and acceptance she has received from the other children. She enthusiastically told and retold her parents of her part in the program which included piano playing for the group. As far as the records show, this was one of Maria's most satisfactory experiences, if not the happiest experience.

On July 15, 1964, only a few days after the termination of the Vacation Bible School, Maria started a two-week physical orientation program with nine other blind children at the Cleveland Society for the Blind. These children ranged in age from ten through twelve years.

Miss Patricia Stone, the Society's Children Programs Coordinator, wrote on the record:

> Maria seems to need considerable help in several areas of functioning. She indicates an emotional disturbance which results

in some anger and hostility toward others and the need to physically hurt people when things don't go her way. She has been overprotected by her family and is quite immature in her thinking and functioning. She has not yet learned how to handle her knife and fork adequately and requires considerable help in this area. She reveals many blindisms, such as frequent rocking motion of her body and she stands in the middle of a room and pivots around on her toes. She is overly affectionate, but can quickly turn her affection into anger and the need to pinch. She talks in a childish way and is seldom serious in her manner. Maria and her parents need considerable help in acceptance of her blindness.

Maria had almost nothing to do with the rest of the group, seldom engaging in conversation and making almost no contribution to group discussion. She had to be urged to move from function to function and her motivation was only slight, no matter what the activity. She was a very slow eater and was always at the table long after the others had finished. She showed very little insight into her difficulties and much of the time seemed to live in a world apart.

She indicated difficulties with concepts, oftentimes making grave errors in identifying objects, such as fruits and vegetables. She was cooperative when given a specific task to perform, but would need constant urging to bring the task to completion.

Maria, in her manner, was cheerful much of the time and yet, as stated above, could quickly become angry if spoken to sternly. Her physical endurance was quite limited.

Maria's Camper's Report for 1964 makes the following comments:

Orientation is very poor. Maria seems to lack a sense of direction and body coordination. Throughout the entire week, she got lost at well-known places and easily recognized spots.

Maria is an introvert. Even laughter must be forced from her at times. She kept to herself all week. Her cabin mates became impatient with her because of her slowness.

She participated in all activities (although, at times, she did so reluctantly). Due to her inability to work with hands, she needed special attention with crafts. Even with constant observation and help, she was unable to complete a belt which would require only 20 minutes of any other camper's time. She worked on a belt two to three hours -- through three sessions.

Maria is slow in dressing. She was surprised that her counselor expected her to dress herself. When told to put on her pajamas, she stood with her hands extended into the air, waiting for someone to pull off her T-shirt. ... Twice "she wet her pants" because she neglected to remove her garments in the bathroom.

> At the table, she was always the last one finished. Her method of eating was very sloppy. In fact, on a cookout she got baked beans all over her face and in her hair.

The Camping Record of 1965 states:

> Maria could not comb her hair. Her clothes are often inside out. She was poor in orientation; often got lost on the camp grounds. Her posture was good, but her personal hygiene was poor. She was hesitant when walking, but less so than in 1964. She lacked self-reliance. She was shy with other campers, although she tried to be helpful and cooperative. She was friendly with the staff and participated readily in camp activities, but she showed no initiative. She did not speak unless addressed by others. She showed progress in mobility, social graces, dancing, teamwork and sociability. She tried harder to do things on her own, although she was often ineffective in dressing herself, making her bed, etc. ... Maria seems ready to learn to take care of herself; she needs only more instruction and time.

The few orientation and mobility reports by Maria's peripatologists should be evaluated against this varied background of her psychological ups and downs which, it seems, were closely associated with her perception of her social environment.

The first report by a peripatologist is dated July 13, 1964, and reads:

> Maria's problems are both emotional and physical. She has a rich fantasy life which usually takes the form of being a "witch" and she is getting somebody. Physically, she moves slowly and seems to have difficulty in orienting herself to her environment. She walks with her left leg stiffly (does not bend knee) and generally appears to be walking on her toes. Long range training is recommended.

The progress, apparently, was extremely slow, as we can see from the letter of June 29, 1966, which the same peripatologist wrote to the parents of Maria and which we reproduce in toto, since it also illustrates the type of reports which were periodically sent to all parents of the juvenile orientation and mobility trainees:

> Dear Mr. and Mrs. M.:
>
> As you know I have been working with Maria during the past school year in the area of orientation and mobility. This letter is to inform you of the progress that has been made, with some possible suggestions for the future.

The purpose of working with a child of Maria's age are fourfold and I would like to list them as follows:

1. The attempt to prevent bad habits from developing.
2. The correction of bad habits of gait and posture which may have already developed.
3. The clarification of his conception about the physical environment and the enhancing of concepts already possessed.
4. The preparation for independent travel when the child has a need and possesses the maturity to do so.

During the year, Maria and I concentrated on learning some fundamental, but important concepts, such as North, South, East and West; the difference between left and right; how to turn left, right and around; how to walk in a more relaxed manner and how to find the way around the school building. Learning these things did not always come easy for Maria. Since I only saw her once a week, there was too much time in between lessons; however, you could be of great assistance in helping Maria to retain these things. Permit me to make the following suggestions:

1. That you continue to encourage Maria to explore her environment at every possible chance.
2. That you constantly remind her of concepts such as left and right, turn left, turn right.
3. When she's walking or riding with you, that you point out North, South, East and West to her.
4. Encourage her to walk with her arms relaxed and take bigger steps.

The above mentioned things are suggestions as to how Maria can be helped. If you have specific questions, please feel free to call. I am sure that with your continued guidance Maria will realize the potential she possesses.

Sincerely yours,

George Auzenne, Peripatologist

GA:mb

It may be worthwhile to reproduce also the lesson-to-lesson mobility report as prepared by Maria's next peripatologist, Mrs. Martha Ball Rosemeyer, on the lessons which she gave Maria in 1967. Every lesson lasted about 45 minutes. For each lesson, the date, the description of the lesson and of the progress are given.

Date	Description of Lesson	Description of Progress
2/9	Human guide and orientation to school. Turns and geometric shapes.	Poor performance on human guide. Turns are executed without awareness. Has no knowledge or skill in identifying geometric shapes. Seems to be in a world apart from her surroundings.
2/23	Human guide technique with emphasis on grip and single-file alignment. Turns and kinesthetic awareness of position of feet, head and body.	Poor carry-over of human guide. Resists the finger grip and wants to put arm through arm. Has no awareness of the relationship between her body parts and objects and people in her environment.
3/2	Worked on orientation to N-S hall, trailing and cross-arm technique.	Seems to be grasping North, South, East and West. Turns sharply when trying to walk straight ahead. Body awareness very poor. Is beginning to relate well to instructor and poured out all her grievances about her mother and aunt and adults in general. Says she is bored and is looking for adventures. Does not have any friends.
3/9	Orientation to building with emphasis on turns and awareness of what is happening around her.	Does not seem to follow a line of reasoning after indicating that she understands the fundamentals. Cannot follow through on her own directions. Seems hostile to the world.
3/16	Orientation to the outside exits of the school. [Development of an] image of the building.	Turns have improved. Am getting her to explain her route and then be able to follow her own directions. Does not understand the layout of the building at all.
3/23	Orientation to principal's office and back to resource room. Trying to get her to express her directions, so she will understand what she is doing.	Located principal's office. Had a large misconception of the layout of the building and made significant progress in clearing this up. Poor on clay map of the building.
4/13	Locating objects. Retrieving dropped objects, sound localization and tracing. Kinesthetic awareness.	No awareness of the library and kitchen area. Made some advances in the localization of sounds, but does not really know how to listen. Acts impulsively and without awareness. Showed some progress in controlling body movements, but was extremely tense during lesson. Seemed about

Date	Description of Lesson	Description of Progress
4/13	(continued from previous page)	(continued from previous page) ready to crack in two. Occasionally made facial contortions. Has strong urges to "feel" the instructor's arms and hug her. Maria talks with extreme hostility toward anything that is expected of her. Everything is worthless.
4/20	Instruction in how to pour water from cup into pitcher and how to use spigot to fill cup and pitcher (as recommended by resource teacher).	Resource teacher had begun instruction with measuring cups and requested my assistance on pouring. Maria did not know what measuring cups were, nor how water comes out of a spigot. Worked on lining up cup under spigot, judgment of sound and weight. Controlled movement when pouring from cup to pitcher. Am meeting with Board of Education home visitor next Thursday re Maria.
4/27	Complained constantly that she could not find any interest in anything. "Everything is boring." Told her to stop complaining and try to find things that interested her; especially emphasized what we were going to be doing in mobility. Orientation to outside. Running, walking on curb, locating echo.	
5/4	Identification of coins. Good. Began tying shoe laces. Got first step down. Enthusiastic. Said she thought all week of all the things that could possibly interest her and tried not to be bored.	
5/11	Worked on manual clock to teach her to tell time.	Said at the beginning that she could not do it or at least had great difficulty. Had no difficulty with me. Concentrated. Seemed excited about all the things we have yet to do. And I am really building it up, trying to get her to be optimistic about the things she can do.
5/18	Outside with bell-ball. Sound localization, tracing, throwing and rolling the ball. Walking, geometrical figures.	Learned very quickly how to throw ball, catch it and roll it. Chased the ball continuously. Had no idea of turns or how to walk a square.

Date	Description of Lesson	Description of Progress
5/25	Trip to supermarket, sensory training.	Worked on her awareness of temperature changes, shape of containers, odors in different departments. Maria gave some unusual and out-of-line answers to questions re sensory impressions and past experiences. Seems to distrust what people tell her. Good on sound localization.
6/1	Tying shoelaces.	Had to start from scratch on position of strings, formation of strings when crossed over. Was able to make progress when tying a knot, although is a long way from being able to do it on her own.

With this, we come to the end of individual lessons, as the summer vacation started. At this point, Mrs. Rosemeyer presented the following interim evaluation of Maria's orientation and mobility training:

> Maria received Orientation and Mobility training once a week during the spring semester at F. Elementary School. She was given lessons in the human guide technique, basic self-protective techniques, and sensory training, but it is felt that she made very little progress in developing skill in moving about or in basic awareness of her surroundings and even her own body.
>
> Most of the time, Maria seemed to be in a world of her own, detached from her surroundings. She had no idea of the layout of the school building, where she had been for the last six years, and walked from one place to another on impulse, being moved by a sound or an air current that happened to occur at the time. Her spatial orientation was nil.
>
> Maria reacted with extreme hostility to anything that she was asked to participate in--whether in school work or on field trips--and constantly complained that she could find nothing in life to interest her and was always bored. However, she was able to develop an honest and increasingly trusting relationship with the mobility instructor, so that during this past semester she may have perhaps taken her first step toward developing a desire for achievement and eventually independence.
>
> It may be significant to note that Maria did not begin to respond with interest or effort to any of the lessons in Orientation and Mobility until the mobility instructor told her, in the latter half of the semester, to stop complaining about how worthless life was and try to find things in which to interest herself. From that point on, she seemed to look forward to mobility and reported each week to the

> instructor on her search for the interesting. She displayed great enthusiasm and previously unapparent motor capability in learning to identify coins, tie shoelaces, throw and catch a ball, read a clock, and pour water from a spigot into a cup.
>
> There had been some question as to a possible neurological impairment which prevents Maria from performing motor activities requiring manipulation of objects. This was brought up in the latest IQ and Personality tests given to Maria in April, 1967 by the school psychologist. However, after conferences between the mobility instructor, school psychologist and the school system's home visitor, it was concluded that Maria's lack of experience in activities of daily living was the cause of her difficulty in manipulating things. Maria is capable of performing manipulative activities, _if_ she is provided the opportunity and adequate instruction to learn them. There does not seem to be any neurological malfunctioning, but simply a lack of exposure, training and practice.
>
> Maria should be scheduled for counseling sessions with the guidance counselor next year at the Junior High School to enable her to work through her hostility and apparent underlying depression so that her energies may be released for more constructive functioning.
>
> Maria's program of Orientation and Mobility Training should be continued on a more intensive basis, if possible.

Although we were able to present only an incomplete case history from the materials recorded in connection with the services provided by the Cleveland Society for the Blind, some of the factors connected with Maria's behavior in general, and with her relative failure in orientation and mobility in particular, are suggested by the materials here presented.

Let us first look at Maria's mother, the most important agent in Maria's socialization process.

She emerges as a strongly dependent person. This dependency was seen especially clearly in the relation to her older sister Josephine where, according to both women, there was always more of a mother-daughter than a sister-sister relationship. Josephine was looked up to as a matriarch and an authority. This dependency pattern was also evident in mother's relationship with Maria where she was unable to take a clear and firm stand and either depended on others to make decisions or gave in to the child. It is this lack of firmness and consistency in mother which helps to explain why Maria could not learn such basic skills as proper table manners or dressing herself and would still often wet herself after the age of ten.

This dependency pattern of the mother contributes to, and is aggravated by, her over-all personality maladjustment. Several reasons for this maladjustment become apparent. First, as we have already seen, mother was greatly dependent. More specifically, she was dependent on her older sister Josephine who has served as a mother-substitute. After the marriage, there continued to be a regular week-end opportunity for this dependence on Josephine through short contacts when Josephine came to pick up Maria and later to bring her back. Apparently, these reduced contacts were insufficient to give the younger sister the needed security, especially as she was now confronted with the new roles of wife and mother where a spinster sister could hardly be an adequate model and guide.

The mother might perhaps have been able to adjust if there were no special problems in the family or, in any case, if she could transfer her dependent relationship to her husband. But this would be possible only if the husband possessed the personality traits which she herself lacked. Her husband, however, is described as a quiet, self-effacing and dependent person who, for instance, thinks that the decisions concerning Maria are up to his wife, her aunt and the caseworker and do not really directly concern him. In spite of his affection for Maria whom he always sees as soon as he returns from the factory, he consents to aunt Josephine's monopolization of the child on all week ends -- the very time when he is at home and could devote a greater portion of his attention to Maria. Indeed, even when he is at home, he is extremely self-effacing instead of being a firm authority figure on whom the dependent wife could depend. He hardly ever says anything, which further increases mother's dependence on what little conversation and support she can elicit from Josephine and the caseworker. Thus, we find here a maladjustment-producing dependent-dependent relationship between the spouses, rather than the needed complementarity of personality traits.[12]

Maria herself further contributes to mother's increased insecurity and maladjustment. Both parents had high expectations for their first child, expectations which were so cruelly shattered when a weak and diseased mother gave birth to a premature, extremely underweight and frail blind baby. The extent of the disappointment and of frustration resulting from this painfully wide gap between the high aspirations and the frightening outcome is seen in mother's prolonged crying and "nervous" spells, as well as in her pronounced dissatisfaction with her role of wife and mother (rejection of the role in which she perceives herself as failing). It is at this point that she openly envies her unmarried sister Josephine who is free of the problems of married life. Mother also feels some hostility toward her husband and, to some extent, toward men in general (for she was "trapped" by him, symbolizing them); and she exhibits hostility and jealousy toward Maria who stole her husband's first affection from her. (Before she was always given a kiss after her husband's return from the factory, while now he always first rushes to see Maria. Besides, Maria stigmatized her before others as a failing mother of an inadequate child.)

Unable to remain dependent, incapable of becoming independent (especially in face of the special problems with which she is confronted), and frustrated with her roles of wife and mother where she sees herself as failing, yet from which she cannot liberate herself, mother is quite maladjusted, tired (physically tired as well as psychologically fatigued), or, in her own description of herself, "the nervous type."

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Maladjusted and insecure, mother can never completely accept her daughter's blindness. At first, she cannot believe that this could have happened to her; it all seems just as a bad dream. And then she hopes and "knows" that her child will see some day. She erupts into hysterical joy on first news of the discovery of the drug that she believes would give Maria vision. As this hope, too, is cruelly crushed, she continues to be torn between her desire to be a good and loving mother (internalization of the social norm for mothers) who takes good care of ("does everything she can for") her helpless child, and her hostility toward Maria who brought so much unhappiness into her life, stole her husband's first affection from her, kept her constantly busy as if she were a maid, and stigmatized her in the society with the stigma of a failing mother of a deficient child. This ambivalence of strong conflicting attitudes aggravates mother's tensions, fatigue and "nervousness" and further contributes to her indecision which has already strived on her personality pattern of strong dependency.

The desire to be an adequate, good mother in spite of a disappointing child and to produce convincing, "concrete" evidence of this adequacy to herself and to others gets the outward expression in her doing everything for her blind child (even dressing and undressing her after the age of ten) and in her "kindness" to her (leniency, few or no demands, special concessions, giving in to her) -- the very treatment which produces an extreme dependency in Maria, together with an absence of opportunity to practice and learn the most basic skills which are generally expected from all girls (including blind girls) of her age.

This overprotective "service" also conditions Maria to expect to be always in command and the center of attention, a strong and dangerous acquired drive which is further reinforced by aunt Josephine (where Maria beautifully satisfies her aunt's own need for complete dependence of others on her).

Thus we see how Maria's personality organization, characterized by an extreme dependency, a need to be the center of attention, insecurity and tension (or "nervousness"), emerges directly from her unfortunate family experiences or from her "primary socialization field."

It is with this basic personality organization that Maria must face the hard realities of the unknown social world outside of the overprotective home "islands." When the outside world satisfies the needs of this personality organization, Maria adjusts to it in a satisfactory manner. She seems to have been happiest in the Vacation Bible School in 1964 where everybody was, apparently, encouraged to be "extra nice" to her, where she received a warm welcome and acceptance from the group, as well as all kinds of affectionate help (making her comfortably dependent) and where, as a blind girl and as a piano player, she was the center of attention. The situation fitted beautifully Maria's personality organization and she was all excited, alert and happy.

Only a few days later, the situation changed considerably, as Maria became a participant in the two-week physical orientation program. Here, she was no longer the center of attention, as she was only one among nine equally blind girls who, in many regards, were much more advanced than she. Furthermore, she was now confronted with the frightening expectations to be relatively independent, for which she lacked the most elementary attitudes and skills. She was in a situation foreign and adverse to her personality organization.

Maria reacted to this difficult situation (whether haphazardly or experimentally, we do not know) with several inadequate responses, including also the following: short flushes of overly affectionate behavior, a response learned from her overprotective mother, as if pleading (or "bribing") for acceptance on the comfortable dependent and the-center-of-attention basis; frustration, transformed into aggression[13] (including striking or pinching other persons) when things failed to work out to her satisfaction; a tendency to withdraw from the group situation when the social atmosphere proved threatening, disappointing, adverse or painful, for instance, when it involved the expectation of possession or of learning of physical or social skills where Maria was at a tremendous disadvantage and, therefore, began to be frightened, tense or "ready to crack in two." Here, an escape through withdrawal seemed to be the easiest route to a tolerable level of adjustment.

At the camp, only a few days later, Maria continued to keep to herself. Her blind cabin mates, far from giving her the "extra warm" welcome and acceptance and making her the center of attention which had made her so happy at the Vacation Bible School earlier during the same summer, were impatient with her because of her slowness and aloofness.

In these last two group situations, Maria, obviously, went through periods of tension, anxiety and strain, as she was faced with social expectations and conditions which her personality was entirely unprepared for and unfit to handle in a positive and constructive manner.

It is very important to note, in this connection, that Maria's 1964 camping experience was on a much lower level of adjustment, learning and achievement than her 1963 experience. By the end of the 1963 camp, Maria "was able to travel independently from place to place" -- an achievement that was neither retained nor relearned in the subsequent years in the very same camp.

The most likely explanation of this difference in mobility skills in the same physical environment between 1963 and the subsequent years (especially 1964) seems to lie in the differences in Maria's emotional adjustment which, in turn, depended on the compatibility, or the relative lack of compatibility, between her personality organization and the social situation as it was perceived by her.

A more incompatible social situation, or a social situation perceived as more adverse because of greater feelings of relative deprivation (e.g., when evaluated in comparison with the Bible School group), resulted in more frustration, hostility, aggression, tension and a general state of maladjustment which represented a block to learning or relearning various skills. By producing a painful need for a tolerable level of security, it also reinforced Maria's dependency pattern and withdrawal tendencies.

Thus, it is this situation-personality compatibility, or the lack of it, rather than Maria's intelligence or other independent factors which seems to best explain her changing attitudes and behavior, as well as her differential orientation and mobility learning capacity. Maria's nursery and kindergarten experience, her Vacation Bible School and, to some extent, her 1963 and, much less so, her 1965 camping experiences, apparently offered social situations which were relatively compatible with Maria's personality organization: she was allowed to remain dependent, venturing into independence (if at all) only after she felt secure to do so (as in her 1963 camping mobility); she was more or less the center of attention or, at least, was a welcome and warmly accepted member of the group according to her own perception; and she was not pressed into learning skills for which she lacked all necessary preparation. Whenever Maria was relatively adjusted and seemed to do well, the compatibility between her personality organization and the social situation (as perceived by her) seems to be the explanation.

All the negative reports, on the other hand, seem to refer to Maria's experiences in social situations which were incompatible with her basic personality organization and her needs flowing from this organization: F. Elementary School experience where the "firmness" of her Braille teacher stands out; physical orientation and mobility programs and also camping experiences during 1964, and, to a lesser extent, 1965; and a part of the mobility training given in 1967 by Mrs. Rosemeyer. In the case of all these negative reports, we have pressures toward independence or pressures to learn skills which require independence and also some previous learning experience. Groups which are perceived as unaccepting (as they don't accept her on the "habituated" center-of-attention basis), competing (where she is tremendously disadvantaged) and, therefore, threatening and/or "stigmatizing her" produce extreme anxiety.

In such incompatible situations, Maria's responses (whether haphazard or experimental or both) are still somewhat uncrystallized (although there may develop an increasing tendency toward rigidity if anxiety-ridden situations, or discontinuities in situations, continue[14]). These responses include frustration which seems to lead to aggression, including the need to physically hurt people (the likely expression of aggression of a poorly socialized and immature child); extreme anxiety and tension which make concentration, understanding and learning nearly impossible or extremely difficult and tiring, no matter how simple a skill (this is partly, but not completely, explained also by Maria's lack of practice, because of her overprotective mother); short flushes of overly affective behavior, including a need to hug, to gain acceptance and affection on the comfortable dependency and the-center-of-attention basis, with quick reversals of the mood when things don't work out as desired; withdrawal from the group which is perceived as threatening because of the incompatibility between its stimuli or responses and Maria's current personality needs; and a tendency to escape from the uncomfortable social environment into a world of fantasy and adventure. Note here especially the wishful fantasy of being a witch and getting somebody -- a situation that would transform the frustrated, helpless and frightened blind girl into a powerful, angry and frightening avenger.

The many threatening and incompatible social situations in which Maria is living outside of her family and the ambivalence, including love and hostility, overprotection and jealousy, acceptance and rejection, which characterizes her family environment, of course, hold little psychological appeal. "Everything" in Maria's life is then "boring" and "worthless." This perception of the world serves both to lower the motivation as well as to rationalize the lack of it and, unless the personality-environment compatibility is improved, the perception of the existing world as boring and worthless is likely to further reinforce the two most dangerous responses: withdrawal from the group (and thus the elimination of corrective and learning opportunities) and a further and deeper escape into a world of fantasy and/or unrealistic adventure.

If our analysis is correct, then it would seem that the task, at the present, would be to first help Maria to become emotionally adjusted. Greater emotional adjustment will, as her 1963 camping experience suggests, increase her ability to learn, as well as to begin to function more and more independently.

While Maria's personality reorganization is, without doubt, the ultimate goal of a true rehabilitation process, it should not be forgotten that one should start with the personality as it is and use it as a basis for gradual improvements. One cannot rehabilitate Maria's personality by expecting immediate opposites of her current personality patterns: independence instead of dependence, a social fair play with give-and-take instead of the center-of-attention cravings, courage instead of anxiety, relaxation instead of tension, etc. A pressure to immediately display such healthy opposite patterns would most probably break, rather than rehabilitate Maria's personality.

The process must be gradual. Maria does need extra warmth and acceptance at the start and she must be the center of attention at first -- an approach which, apparently, proved successful in the one-to-one confrontation between Mrs. Rosemeyer and Maria. Only after she feels reasonably secure in a compatible social atmosphere and while learning elementary skills which are not too difficult for her due to the complete lack of previous practice, can she gradually learn to develop more and more independence and become more and more environment-oriented rather than self-centered.

Once Maria achieves this level of adjustment, there can be little doubt that her orientation and mobility learning ability will greatly improve, as a few isolated instances in her past history plainly suggest.

Succeeding with Fred Who Moves from Hostile Competition to the Role of Junior Counselor

Fred, who was born in 1952, comes from a family where both his mother and his younger brother Johnny are legally blind, although they have learned to make good use of their very limited residual vision. Fred himself had six operations by 1962 in the vain hope that his sight might be saved. The operations were unsuccessful and Fred has been totally blind for the last five years.

In 1964, Fred's orientation and mobility instructor prepared an unusually thorough case history, the most relevant parts of which are reproduced below.

> Fred lives with his mother and father and one younger sibling. The younger sibling is legally blind but has good use of his remaining sight. The mother is also legally blind, with fairly good use of her residual sight. Much of the responsibility for the welfare of this family falls necessarily upon the shoulders of the father, who is the sole fully sighted member. The father shows the anxiety that he feels in fulfilling his role, with three members of the family having visual difficulty.
>
> The first strain one notices in Fred's emotional makeup is his feeling about himself. Father Carroll has written that the advent of blindness in a person's life is many times equated with the loss of love. This may well be the case with Fred, who has only been totally blind for about three years. Also, added to this is the fact that his sibling has some sight and is, indeed, the same size as he is. Fred reacts in a very hostile, negative manner toward his brother. There are times when the worker suffered a slip of the tongue and called Fred "Johnny." Fred would respond by saying, "Who is he? I don't even know him." At other times, Fred would fight with his brother over the use of some piece of equipment. It was noted by Fred's father that this rivalry went on to the extent that if Fred made a friend, he didn't want him to associate with his brother Johnny.[15]
>
> Fred seems to have deep feelings about himself and his own image. He makes statements about not wanting to associate with "blind kids" and his actions, especially with the cross-body technique, indicate that he doesn't want to be identified as a blind

person. During picture taking time he would generally hide his face so that his picture could not be taken.

At one point worker tried to do something about Fred's eating problem as Fred seldom ate anything at the noon meal. Worker asked Fred if he would wash up for lunch. Fred pointed out that this was not necessary since he didn't eat anything anyway, and that worker should know that by now. Worker pointed out that if he did not show up at the table, then the other boys and girls would miss him and would notice his absence. Fred replied in a very self-deprecating tone that this was not so -- nobody would miss him at table. At this point, Andy, who was present, very strongly said that he would miss him and he knew everybody else would, too. It is well to note that at this noon meal Fred ate a little something for the first time in the whole session.

It has been noted that Fred seems to achieve very well. He achieves so well, indeed, that most of the program was merely diagnosis of what he already knew. However, this achievement seems to place a great emotional strain on this boy. At the end of the morning period he was apt to have some sort of an emotional upset. At one point, the rehabilitation director had to place him by himself in the occupational therapy room while the rest of the children ate, due to an emotional upset. Fred is probably straining every fiber to keep ahead and to do the things that he thinks sighted children do. He is probably trying to stay ahead of his brother and, at the same time, through achievement, to regain love. There were numerous circumstances which worker took advantage of so that Fred could give of his knowledge and ability to somebody less knowledgeable. Fred seems to get an immediate feeling of satisfaction from telling somebody something that he does not know or cannot grasp as fast as he can. However, this soon passes away and Fred is struggling again to keep ahead, with the attendant emotional strain, as he forces himself along the path.

Fred is not comfortable in the group situation. He has a tendency to move away from the group. He seems to be emotionally unstable and too insecure to participate in the give and take of the group situation. This worker believes that the group probably holds too many factors which Fred cannot anticipate, and which he may feel he cannot quickly grasp and master.

Intellectually, Fred has the wide range of interests and understanding of a boy at the height of latency. He seems to be learning and soaking up knowledge at an accelerated rate. His interests are broad and varied. His interests are followed very avidly by both parents and it would seem that he is the center of a family constellation which revolves around him. The responses of his parents in the group situation were only of Fred, very seldom of Johnny.

If Fred's original social psychological adjustment was unhealthy to the extent that it revolved around the denial of blindness, a disjunctive competition with others, especially with his younger brother Johnny, and a withdrawal from situations where he felt too insecure to compete, there obviously had also been some advantages in the area of learning conceptualizations, orientation and mobility, as these processes were a part of his home environment where the problems of blindness were dealt with also by his mother and his brother Johnny. This is how the report continues:

> In the whole area of conceptualization, Fred is excellent. He can accurately determine the size of objects. In the case of the pop machine, he automatically determined its height by computing the difference between how tall he was and the remaining portion of the pop machine projecting above his head. He used the spread of his arms to determine the width of objects. As a matter of fact, he computes the size of most objects from what he knows about how big his hand is, or the distance by the length of his stride, and so on.
>
> He did fairly well with the relief map of downtown Cleveland. Once he touched certain prominent objects like the lake, the river and the Terminal, he remembered them and would come back and identify them again. He also identified those things which have some relationship with them. He seems to operate rather well with the step-by-step relationship between one building and another. For example, he learned quickly that the County Courthouse was in a certain position to the Stadium and that the City Hall had a certain relationship to both the Courthouse and the Stadium. He quickly grasped the relationship of other objects and worked out several combinations using this type of process.
>
> The worker asked Fred to model in clay a scale of the neighborhood in which he lives. This was done with a good deal of interest and Fred spent the better part of an hour explaining all the things that were in his neighborhood and how he traveled around it on his own.
>
> His tactual perception is good and he identified small objects with his hands and fingers rather well. He had some difficulty telling the difference between a penny and a dime. When he was told about his mistake, he immediately began to devise his own method of concentrating on the differences between the two coins. At a later time, Fred made a purchase in the pet store and had no noticeable difficulty between the penny and the dime.
>
> He did very well in the trip to the supermarket, being very anxious to identify as many objects as he could. These objects were generally identified with great precision and accuracy. Worker noticed that the Braille tags on the relief map of Cleveland were read with fair accuracy and rather quickly.

Concerning Fred's orientation and mobility training in the Society's program for blind children we read:

> Fred was very good on inside orientation. He quickly learned his way around the inside of the building, and how to use all facilities he might need. He quickly identified all objects such as file cabinets, desks, chairs, air conditioner, and so on. He was quick to identify sounds -- whistling teakettle, air conditioner, refrigerator, etc. He was infallible in identifying underfoot textures such as carpeting, wood floors, tile floors.
>
> One exception was noted in the accepting of a technique for walking more safely in the interior of the building. Fred was very resistant to accepting the use of the cross-body technique. The worker asked him what he felt was wrong with this technique and Fred mentioned that he felt that the positioning of the lower arm across the body was uncomfortable. At one point, Fred asked the worker whether all blind people used this. Worker pointed out that it was the safest and surest technique of getting around in an unfamiliar room and asked him if he believed this. Fred seemed to confirm but, after this interchange, he seemed to be even more resistant to its use. Worker feels there is a strong possibility that the positioning of the hands means to Fred that he is more easily identifiable as a blind person. There is considerable evidence that Fred rejects his blindness and does not wish to be identified with blind people. This may be the real reason for the almost complete rejection of the technique.
>
> On the outside, Fred was once again excellent in identifying underfoot textures of all kinds. In addition to this, he remembered and volunteered the information that a fault in the sidewalk was remembered by him from a previous trip, and he immediately associated this fault with the proximity to a wrecking operation.
>
> Fred was very good at identifying the flow of traffic, where it is going and where it is coming from. Several times he volunteered to take the worker across the street just by listening to the traffic sounds. Worker was very careful to use the situation in such a way that Fred did not feel overconfident. Worker would always say, "Are you sure that we can go now? Why do you tell me we can walk out into the crosswalk?" Fred would respond by saying, "I can hear the flow of traffic with us, start up," and would give other pertinent signs that he heard the significant things very well. Worker would like to suggest that he is still not sure that Fred should be on his own all the time in traffic. He is still a boy 12 years old (1964) and subject to lapses of judgment.
>
> Fred is very good with concepts of distance and direction. He accurately determines the distance between himself and an object making some sort of sound. He knows the points of the compass very

> well, orienting himself from the position of the sun. He seems to anticipate the twisting and turning that each trip outside may take, and it is very difficult to turn him around so that he loses his sense of position in relation to the points of the compass.

In 1964, Fred also attended the Society's Highbrook camping program for children. His personal appearance and orientation on the camping grounds and within the buildings were evaluated as having been good. But he responded favorably to staff only when he was given special attention, a pattern which had clearly been developed in his family, as it has been suggested by the previously reported remarks: "It would seem that he is the center of a family constellation which revolves around him." Fred's participation in the camping activities was very poor and he hid on talent night. From what we had learned about this boy, it would seem that he was insecure about his chances to "outshine" other performers and, having been conditioned to view such occasions as a matter of competition where he had to be the first one, his anxiety rose to the point where it became unbearable.

Between the summers of 1964 and 1965, Fred must have made tremendous strides in his personal and social adjustment. It looks that he became much more reconciled to his total blindness and sufficiently secure to become interested in group activities. The Camper's Record of 1965 contrasts sharply with that of 1964. Not only is Fred given top ratings on personal appearance and orientation, but there are also many other favorable remarks on his behavior:

> He is friendly, helpful and self-reliant. He helped others around the camp. He learned well mobility, social growth, eating habits, social graces, group decisions, activities, dancing and teamwork. ... Fred is one of the nicest teenagers that we have ever had in the camp. He would make an excellent junior counselor.

During the summer camp of 1967, Fred did, indeed, become a junior counselor. Apparently, he greatly enjoyed his role. He was described as having been clean, active, friendly and quick to learn. He "did what he was supposed to do." He showed leadership ability and initiative. He enjoyed swimming, pony-riding and piano-playing. He was good in orientation and mobility. But he remained self-conscious about his eating habits.

Fred also attended the Summer Teen Program of 1967 at the Society's Sight Center. Mrs. Martha Ball Rosemeyer, the Program Coordinator, made the following comments:

> Fred learned quickly and well in all phases of the Summer Teen Program. He was attentive and followed instructions well in all courses.
>
> Because he had once seen, he could recall visual images and apparently used these effectively for orientation and effective performance in activities of daily living.
>
> He expressed a great deal of enthusiasm for the techniques taught for eating and cutting meat and immediately applied these to his home situation.
>
> Fred was well-liked and accepted by the teen group, but the instructors felt that he tended to have a disruptive influence on their classes, especially group classes. He was many times negative, particularly to suggestions regarding integration with the sighted world.
>
> In orientation and mobility, he was excellent in his long cane skills, but was extremely fearful of interaction with the sighted public. He always complained about not wanting to go out on a mobility lesson.
>
> All factors point to resumption of a steady, well-planned orientation and mobility training program for Fred, which will give him an opportunity to work through some of his fears and apprehensions about his capabilities as a person.

The already familiar emphasis on the personality-situation degree of compatibility helps to explain Fred's behavior. He was excellent in many regards but, according to the instructors, "tended to have a disruptive influence on their classes." Apparently, Fred has been conditioned to want attention and the counselor's role was much more compatible with his competitive, self-assertive orientation than the role of a mere pupil. In fact, he was competing with the instructors (themselves college students) for attention and status which competitive tendency was perceived by them as a "disruptive influence."

Fred's personality is also characterized by rigid identifications or overidentifications. Originally, he overidentified with the sighted and rejected even the cross-body technique, since he was afraid it would identify him with the blind. By now, it seems, that he has accepted his blindness, but he now overidentifies with the blind, with a comparable rigidity. He has been "particularly negative to suggestions regarding integration with the sighted world." We have here the Saul-Paul persistence of personality traits. Saul who at first identified with the enemies of Christ turned into Paul who identified with Christ. But he remained equally tireless defending his new ingroup and denouncing the outgroup as he had been before his conversion. Identification has changed while the personality traits and tendencies persisted.

Fred's change in attitudes concerning eating from self-consciousness at the summer camp to enthusiasm at the Teen Program is most intriguing. One could hypothesize the following possibilities: a better rapport with the particular instructor or the latter's better teaching technique; a realization that others were less capable in correcting their problems than he; or, perhaps, simply greater security within the group due to his recent ego-expanding experiences.

Helping Betty Who, with Courage and Determination, Makes the Best of Her World of Darkness

Betty was born in 1955, with congenital nystagmus and cataracts. Until 1964, her family lived in another city of Ohio where Betty attended sight-saving classes. Betty's limited vision, however, rapidly deteriorated and, during summer of 1966, she has become totally blind. Currently, she has light perception only.

Living in a mixed working and lower-middle class neighborhood on the outskirts of Cleveland since 1964, Betty has come into contact with the Cleveland Society for the Blind in March of that year. Her father who is a skilled worker in an automobile factory and her mother who is a beautician felt that Betty's greatest need at that time was for good companions and wholesome recreation.

The Society responded immediately by providing a talking book for Betty and by inviting her to the Highbrook Lodge where she could meet other blind campers and friendly staff members. Betty accepted the invitation and, although she tried hard to be friendly, she was extremely "homesick" and, after three days, had to be taken home. She was, nevertheless, befriended by Society's Children's Services Coordinator, Miss Patricia Stone, who is herself legally blind, and this friendship has been preserved to the present day. Miss Stone offered help with proper planning and made various useful arrangements for Betty. Betty began taking Braille and piano lessons and making friends in various group activities. She was also given comprehensive orientation and mobility training.

Within less than a year, she gladly agreed to make a second try at the

Highbrook summer camping and then attended the children's session between July 13 and July 22, 1967. By this time, she has accepted her total blindness and was determined to make the best of her world of darkness. She was not any longer depressed and withdrawn and she functioned very well in all camping activities. According to Miss Stone,

> there seemed to be a complete change in Betty's attitude toward herself and the world around her. She was outgoing, helpful with the younger children, accepting her share of responsibility for camp duties, and she entered wholeheartedly into the camp program. At the end of the session, she cried when she boarded the bus for home.

In the orientation and mobility where Betty has by then received thirteen lessons from Mrs. Rosemeyer alone, her scores on attitude, ability and actual achievement in the human guide technique and the residential cane travel have all been outstanding ("4" which is the highest).

In August, 1967, Betty also was one of the eight participants in the Society's Summer Teen Program in Orientation and Mobility. Mrs. Rosemeyer, the Coordinator of the Program, made the following pertinent notes concerning Betty's participation:

> Betty made "average" progress in the Summer Teen Program but certainly did not perform as well as was expected from her previous excellent performance in Orientation and Mobility during the regular school semester. She missed two full days out of the eight days of the program because of attending a church summer camp.
>
> In Orientation and Mobility she learned to move about well in a residential area and reached the phase of traffic light crossings by the time the program ended. However, she was extremely disturbed when traveling in the residential area near the Sight Center, for this had been characterized by her parents as a "dangerous slum area." This uneasiness and fear could be one of the reasons for her lack of enthusiasm in the program.
>
> Betty participated in only a limited way in physical education because of an asthma condition.
>
> She was quiet and sometimes withdrawn, but was friendly with

the rest of the group and was accepted well. She gained apparently quite a bit of confidence from the group discussions.

At least two situational factors help to explain why Betty was only "average," rather than above average in this program. First, there is the principle of relative deprivation. A church summer camp was given at the same time and was, undoubtedly, perceived by Betty as being more pleasant, if not more important, than the Summer Teen Program for the blind. Second, as Mrs. Rosemeyer perceptively observed, the environment where the program was held was apparently perceived by Betty as a "dangerous slum area" which, undoubtedly, increased her anxieties.

But these were contingent, temporary, situational factors which, in spite of their temporary adverse effect, are not likely to have any lasting influence. It must also be remembered that, in spite of these two adverse factors, Betty still performed in a satisfactory manner, although below the previously established expectation level.

Comparing the case of Betty with that of Maria, or also with Ann's, one sees that various types of family orientations and interaction contributed to strikingly different personal and social adjustments of their respective blind children.

While the mothers of Maria and Ann were extremely overprotective and produced in their children a crippling dependency which hindered Maria's and Ann's personality and social adjustment and minimized their learning ability in incompatible situations, these mothers also failed to accept the blindness of their children, with the result that both Maria and Ann felt insecure and rejected and, consequently, responded with distrust and hostility.

By contrast, the parents of Betty were relatively independent themselves and they fostered independence in Betty. They never sought at the Society emotional support for themselves, but tried only to rationally discuss and select those available programs which they thought would be most beneficial to Betty's over-all growth. While they were concerned about Betty's safety and authorized various programs only after having carefully checked on the Society's safety precautions, they wanted Betty to live a life of a normal child and always encouraged her to be courageous, independent and even helpful to others. Although they could not prevent Betty's normal "period of mourning" for the complete loss of her sight in 1966 (which should actually be allowed for),[16] they immediately started encouraging a constructive approach to blindness and refused to ever become overprotective and ambivalent in their feelings toward Betty.

Thus, although the social economic background of Maria's and Betty's parents is surprisingly close (both fathers work as skilled workers in an automobile plant and both mothers are ordinary housewives), there were essential differences in the two families' interpretation of blindness and the techniques considered most appropriate for dealing with a blind child.

Consequently, there were strikingly different adjustments to blindness and life in Maria and Betty.

Failing in the Case of a Progressively Senile Client

Mr. T., a long-retired shop employee, has had visual problems, with a gradually diminishing vision, since 1925, when he was only 32 years old. He has become legally blind 20 years later, in 1945. Currently, he has light perception only. For a number of years the client has also been suffering from arthritis which has been especially painful in his hip.

The client's first contact with the Cleveland Society for the Blind was in

July, 1963, when he came to Cleveland only for a short time to get married. At that time, he requested a white cane. In August, 1963, the newly-wed couple left for an adjacent state.

In May, 1966, the Society received a telephone call from the client's wife who reported that she and her husband returned to settle in Cleveland and that her husband suffered sharp pain in his eyes. Mrs. T. asked advice about the clinic to which he should go. Since the client is a war veteran, he was referred by his caseworker to the Veterans Administration Hospital. The hospital then made arrangements for his admission to the proper eye clinic.

The client and his wife live in a two-bedroom apartment which, according to the caseworker's records, has always been neat and comfortably furnished. The monthly rent is $75 a month, plus utilities. The family's total monthly income from Veterans Administration and Social Security is $304. The couple seems to manage well on this amount.

In May, 1966, the client received a talking book machine and he repeatedly assured the caseworker that he greatly enjoyed listening to it. At the same time, he was also referred for orientation and mobility training. Although he requested outdoor mobility training, the client was unable to master even the simplest elements of safe and effective independent indoor mobility. He depended completely on his wife.

Discounting some previous mobility training, seven attempts were made between January 22, 1967, and April 10, 1967, but they all met with complete failure. Although the client has been described as a friendly and pleasant person (and he had a short white cane since 1963, which he used primarily for support and only occasionally made clumsy efforts to utilize it as a mobility device), he manifested several signs of a rapidly encroaching senility: a very short attention span, an inability to comprehend even the simplest skills and a failing memory.[17] While there seems to have been an affectionate relationship between the client and his wife and she "has taken very good care of him," she has also been overprotective and somewhat domineering which may have contributed to the client's progressive personality deterioration and to his loss of motivation and ability to learn.

Succeeding with a Blind Geriatric Client in Spite of Her Diabetes and Arteriosclerosis of the Legs

Mrs. N. has been losing her vision since 1949 and has become legally blind in 1951. Diabetic retinopathy is the eye pathology primarily responsible for her loss of vision. Currently, she has light perception only in her right eye and sees hand movement at a distance from one to five feet with her left eye. The client was advised by her doctor to take plenty of rest, to keep her legs at hip level when sitting, to avoid exertion and not to walk longer than ten minutes at a time. She keeps diet and takes oranase.

Very little is known about Mrs. N.'s social history. She is Negro and Protestant. She says she is married, but her husband lives separately and she does not know where. She claims that her husband contributes to her support and provides her transportation -- a claim which does not seem to be fully convincing. She has a son. She receives Social Security. She lives alone in a poor neighborhood in a downstairs apartment, although her niece occasionally joins her for shorter periods of time.

The client has referred herself to the Society in January, 1966, expressing an interest in mobility, group work and home teaching.

Since March, 1966, Mrs. N. has received the home teaching services where she was a relatively successful student, learning skills such as telling time, sewing, ironing, lighting the burner, distinguishing coins, telephone dialing, script-board writing and reading and writing Braille.

In summer, 1967, Mrs. N.'s mobility instructor selected her as an example of a "relatively successful orientation and mobility trainee, in spite of her handicap." Her orientation and mobility record shows that she had a minimal amount of training in March, 1966. At that time, a severe illness interfered and her training was temporarily terminated.

The client's orientation and mobility training was resumed during the first half of 1967 when she received a total of 16 lessons. She retained very well what had been taught her in March, 1966. She also soon learned safe and effective residential travel and progressed to small business areas and to travel by bus, everywhere showing a good learning capacity and an excellent retention. After having received only 16 orientation and mobility lessons, Mrs. N. has become a safe, effective and independent traveler, using her long white cane with considerable skill. While she cannot make long trips due to her secondary handicaps, she can travel quite safely and effectively short distances and, occasionally, also longer distances, provided that it is possible for her to sit down after every ten minutes or so. As no further training was needed, her case was closed in orientation and mobility on June 21, 1967.

The case of Mrs. N. illustrates how secondary disabilities establish definite limits within which orientation and mobility training is feasible. In 1966, the secondary limitations were so severe that training and learning were entirely impossible. In 1967, however, while the limits were still there, they have broadened considerably, making safe and effective travel possible within a ten-minute range in residential and small business areas. As long as her walking did not exceed ten minutes, and when she was able to secure a seat, she has also learned to travel by bus. Her high motivation, good intelligence, good hearing, retention of tactual sensibility, good emotional balance, absence of overpowering worries, and a good rapport with the mobility instructor undoubtedly were among factors contributing to her success in orientation and mobility training.

Overcoming Extreme Kyphosis, Arthritis and Heart Ailment

Miss S. lost her left eye in a childhood accident. Retinal detachment was responsible for her loss of vision in the right eye, in February, 1965, when she was 70 years old. She has no light perception in her left eye and only 20/400 vision in the right eye. She also suffers from extreme kyphosis (humpback), a heart condition and arthritis.

Miss S. worked for a Cleveland commercial firm as a bookkeeper for about 30 years. Her current monthly income is $138 ($84 from Social Security and $54 retirement pension). She now lives in a golden age center and keeps very active in various activities, including crafts and several social clubs. The Society provided the client with a talking book machine and arranged for a friendly visitor who helps her with shopping, reading, etc., and generally acts as an interested and supportive friend. In addition to low vision and hearing tests, home teaching, camping, group work and orientation and mobility services were also provided.

Miss S. was first visited by Society's blind home teacher, Miss Mary Hugo, in July, 1965. By the end of September of the same year, the client learned to thread a self-threading needle and write with the help of a Marks writing board (which she found easier to use than the ordinary script-writing board). Miss S. also quickly mastered telephone dialing and learned how to distinguish coins and how to put away her paper money so that she could later identify the proper value of each bill. She was also taught how to regulate the oven, etc. The client was very grateful for the home teaching services and the home teacher felt amply rewarded when a letter, written by a friend of Miss S., was read to her. Said the Philadelphia friend: "When I saw your handwriting again after so long a time, tears came to my eyes. ... I could read every word of it!"

Miss S. has been described by all staff members at the Society's Sight Center, as well as by the two volunteers who worked with her, as a friendly, highly motivated, energetic, independent and grateful person. Being Jewish, Miss S. was very careful about her diet. Mrs. Robert Beatty, a volunteer, once brought her some homemade goodies which Miss S. politely declined. The volunteer then took her to various stores where kosher foods could be bought.

Miss S. was active in Sterling Club, Able Booster Club, Hand Crafts Class and camping. She enjoyed all crafts and social activities and was especially fond of camping at the Society's scenic Highbrook Lodge. Although she was still suffering under the shock of her recent loss of sight during the 1965 camping period, she made many new friends at camp. While she was described as quite disoriented outside of her cottage at camp, the Society's many group services, including camping, undoubtedly contributed to her quickly rising morale and motivation.

A matter of special psychological interest is that, while the client was able to accept her blindness (first intellectually and then emotionally) and learned to react to her other handicaps in a constructive way, she could so far, neither intellectually nor emotionally, accept her loss of hearing. She repeatedly assured the Society's audiologist that she had no hearing problem whatsoever. True, she did have some trouble understanding others in group situations, but this was because "other people do not talk clearly." In addition, her right ear was "stuffed." This continuous resistance to acceptance of a hearing loss might have been due to this client's realization that blindness would not be "crippling" as long as it could be compensated for with good hearing. Not the loss of sight, but the loss of hearing in addition to that of sight, would render her entirely helpless. Her persistent denial of any hearing problem and the interesting rationalizations which she developed may have been her way of "fighting away" the feelings of helplessness.

The first reference to client's orientation was made in the Camper's Record for summer, 1965, only a few months after the client's loss of sight. Here, the counselor wrote: "Her short memory and failure to use her sight [sic] made her one of the most disoriented campers at the camp this summer. She is interested in peripatology training, but I doubt that it would do her much good."

The orientation and mobility report submitted by Society's peripatologist, Miss Susan Hoehn (now Mrs. Sullivan) on January 5, 1966, did not substantiate the camp counselor's somber prediction. The report reads:

> At the initial interview (9-14-1965), Miss S. was still in the process of adjusting to her recent loss of sight and was quite afraid and confused. She was able to move about her apartment safely, but would not leave it, or the building, alone.
>
> Miss S. was seen twice a week from September 14, 1965, to January 3, 1966. Early lessons were spent in the building, learning how to use the elevator and learning basic cross-body cane techniques. She showed a great deal of determination and became well oriented inside the building. Much time was spent in adapting the touch technique of cane travel to her needs, as both wrists are weak, the left arm having been broken in a fall a year ago and the right wrist stiffened due to arthritis.
>
> The client travels to the mail box and remains quite well oriented on the grounds around the center [where she lives]. She is also capable of moving safely up and down stairs, but occasionally becomes quite fearful and easily fatigued.

> I feel that Miss S. has progressed to a point of safe travel within a familiar area. Lessons will be discontinued until warmer weather, except for some lessons on indoor orientation and travel during her weekly visits to the Society's craft class. Raised numerals are to be placed on the elevators on each floor [at the Golden Age Center] and some orientation will be necessary when this is accomplished.
>
> During the spring of 1966, the client requested further outdoor training. A re-evaluation of her hearing was made and it showed losses up to 40 decibels in the higher frequency ranges. Due to this hearing loss and because of client's very frail physical condition, it was felt that it would be unsafe for her to cross the streets alone.

In spite of her severe handicaps, Miss S. has learned many skills from the Society's home teacher and the peripatologist. She has become a safe and effective traveler indoors and in her immediate neighborhood. Human guide services have been provided by the Society's volunteers on the relatively rare occasions when Miss S. has ventured into unfamiliar surroundings.

The case of Miss S. is instructive in more than one way. We see that, at first, when she was still in the state of shock or "in the period of mourning" for the loss of her sight, she gave to the then camp counselor the impression of a disoriented and confused person, with a poor memory, who probably could not profit to any significant extent from the orientation and mobility training. Fortunately, the staff members did not accept this somber prediction, which could have easily become, at least in part, a self-fulfilling prophecy, but continued to use group work, volunteers, home teaching and other services to help the client to make a satisfactory emotional adjustment.

As soon as a better adjustment was achieved, the home teaching, as well as the orientation and mobility training, began to pay off and the client learned well in spite of her many secondary handicaps, including extreme kyphosis, some loss of hearing, heart ailment and arthritis. These secondary handicaps established the limits beyond which the client could not proceed with safety and efficiency, such as independent travel in unfamiliar areas. For such travel the human guide technique was learned and the guide supplied with the help of the Society's network of volunteers. In spite of the secondary handicaps, the client has learned safe and effective independent traveling methods inside her building and in the familiar immediate neighborhood.

Several factors, undoubtedly, contributed to this client's relative success in orientation and mobility, in spite of her many secondary handicaps: a satisfactory intelligence level, the ability to establish a satisfactory emotional balance with the help of various activities and other emotional supports that were provided; a strong motivation to overcome obstacles and function as independently as possible, apparently a life-long personality pattern. While the client lacked the necessary strength to accept her loss of hearing (as hearing, apparently, was perceived as a compensatory sense for the lost sense of sight and, therefore, the one that would help her to remain independent), the human guide services were made sufficiently pleasant and reassuring so that the client was able to accept such "friendly companionship" in unfamiliar surroundings, without suffering from feelings of helplessness.

Thus, the client was enabled to learn the necessary orientation and mobility skills within the realistic limitations of her secondary handicaps and she was helped to accept assistance of a human guide in those areas where independent travel could become a hazard to her safety.

* * * *

Although each case is unique, each case history teaches us something about the behavior in general and about the orientation and mobility learning in particular.

In this brief review of selected case histories we have had an opportunity to see how family orientations and interaction processes shape a blind child's adjustment to blindness and to his environment. We have also seen how the earlier adjustment patterns have a strong tendency to persist and probably shape even a geriatric blind client's adjustment to old age and blindness.[18]

One also notices that those types of personality and social maladjustments which include strong dependence, whether due to overprotective mothers or wives and associated with early socialization or observed again in senility, make the orientation and mobility learning much more difficult and relatively less successful.

FOOTNOTES

1. On the effects of the feelings of relative deprivation, see Samuel A. Stouffer *et al.*, *The American Soldier: Adjustment During Army Life*, Vol. I, Princeton, N. J.: Princeton University Press, 1949.

2. For an excellent analysis of the effects of maternal overprotection on the child's personality, consult D. M. Levy, *Maternal Overprotection*, New York: Columbia University Press, 1943.

3. For some effects of such inconsistency and discontinuity in maternal behavior, see Arnold W. Green, "The Middle-Class Male Child and Neurosis," *American Sociological Review*, February, 1946, pp. 31-41. See also Robert R. Sears *et al.*, "Some Child-Rearing Antecedents in Aggression and Dependency in Young Children," *Genetic Psychology Monographs*, 47, 1953, pp. 135-236; and Ruth Benedict, "Continuities and Discontinuities in Cultural Conditioning," *Psychiatry*, 1, 1938, pp. 161-167. On the "concept of the double bind," see Irving E. Alexander, "Family Therapy," *Journal of Marriage and the Family* , May 1963, p. 148 ff. An excellent over-all study in this area is Robert F. Peck and Robert J. Havighurst, *The Psychology of Character Development*, New York: John Wiley, 1962.

4. Kingsley Davis in his analysis of the case of Isabelle who suffered from extreme isolation in her early childhood points out that even "specialists working with her believed her to be feeble-minded." That this belief was wrong was clearly shown after a period of intensive training thanks to which Isabelle's "I.Q. trebled in a year and a half" and "she achieved a normal mentality within two years." Cf. Kingsley Davis, "Final Note on a Case of Extreme Isolation," *The American Journal of Sociology*, March, 1947, pp. 432-437. Frequently what is due to a lack of adequate interaction is erroneously perceived as feeble-mindedness.

5. Cf. James H. S. Bossard and Eleanor Stoker Boll, *The Sociology of Child Development*, New York: Harper, 1960, pp. 89-111.

6. Cf. Dorwin Cartwright and Alvin Zander, *Group Dynamics: Research and Theory*, Evanston, Ill.: Row, Peterson and Co., 1960, pp. 78-94 ff.

7. Cf. David C. McClelland *et al.*, *The Achievement Motive*, New York: Appleton-Century-Crofts, 1953; Eli Ginzberg *et al.*, *Occupational Choice*, New York, Columbia University Press, 1951; A. H. Maslow, *Motivation and Personality*, New York: Harper, 1954. See also R. Barker, T. Dembo and Kurt Lewin, *Frustration and Regression: An Experiment with Young Children*, University of Iowa Studies in Child Welfare, 18, No. 1, 1941.

8. Cf. Gordon W. Allport, *The Nature of Prejudice*, Garden City, N. Y.: Doubleday and Co., 1958, pp. 355-358, 364-366 ff.; Calvin S. Hall, *A Primer of Freudian Psychology*, New York: The New American Library, 1954, pp. 89-91 ff; John F. Cuber, *Sociology: A Synopsis of Principles*, New York: Appleton Century Crofts, 1959, p. 268 ff; and Bernard Berelson and Gary A. Steiner, *Human Behavior: An Inventory of Scientific Findings*, New York: Harcourt, Brace and World, 1964, pp. 282-283.

9. For a bibliography of studies on self-concept, see Wilbur B. Brookover, *et al.*, *Self-Concept of Ability and School Achievement*, II, East Lansing, Mich.: Bureau of Educational Research Services, Michigan State University, 1965, pp. 215-219. See also S. Frank Miyamoto and Sanford M. Dornbush, "A Test of Interactionist Hypotheses of Self-Conception," *American Journal of Sociology*, 1956, 61, pp. 399-403.

10. A few other cases observed in this project suggest that it may be the dissatisfaction with the social situation which causes the complaining about long hours rather than the long hours causing the dissatisfaction with the social situation.

11. Brookover found that when various professionals tried to improve the self-concept, and the associated ability to learn, by working directly with the problem pupil, they failed. On the other hand, when they worked with pupil's family as an "in-between," they were quite successful. Cf. Brookover *et al*, *op. cit.*, pp. 99-100 ff.

12. Cf. Robert F. Winch, *Mate Selection: A Study of Complementary Needs*, New York: Harper and Row, 1958.

13. Cf. J. Dollard, L. W. Doob, N. E. Miller, O. H. Mowrer, and R. R. Sears, *Frustration and Aggression*, New Haven: Yale University Press, 1939.

14. Cf. Theodore M. Newcomb, *Social Psychology*, New York: The Dryden Press, 1950 pp. 399-400 ff.

15. Cf. Paul B. Horton and Chester L. Hunt, *Sociology*, New York: McGraw-Hill Book Company, 1964, pp. 321-343. See also Rudolf Cujes, *Cooperation: The Basic Social Process*, Antigonish, N. Sc.: St. Francis Xavier University Press, 1960, pp. 1-11.

16. Cf. Louis S. Cholden, *A Psychiatrist Works with Blindness*, New York: American Foundation for the Blind, 1958, pp. 73-83 ff.

17. For a concise statement on senility, see Laurance F. Shaffer, "Abnormal Psychology," in J. P. Guilford (Ed.), Fields of Psychology, New York: D. Van Nostrand Company, 1948, pp. 233-234 ff. See also Jeanne G. Gilbert, "Aging Among Sighted and Blind Persons," The New Outlook for the Blind, September, 1964, pp. 197-201.

18. Some studies have found evidence that those well adjusted to old age had a happier childhood family life. Cf. Suzanne Reichard, Florine Lioson and Paul J. Peterson; Aging and Personality: A Study of Eighty-Seven Older Men, New York: John Wiley and Sons, 1962. See also Robert F. Peck and Herbert G. Richek, "Personality and Social Development: Family Influences," Review of Educational Research, December, 1964, pp. 574-584.

7. EVALUATION

While some evaluative comments could be found in the case studies and, to a smaller extent, also in other parts of this report, the present chapter will try to systematically summarize and evaluate all major findings of the entire project.

First, we shall present the frequency and percentage distributions of grades which the clients received on various phases and aspects of their orientation and mobility training.

Secondly, a correlational analysis will be presented in an attempt to establish the relative importance (if any) of such variables as a client's age or duration of his blindness for the effectiveness of his orientation and mobility learning.

Thirdly, special group projects will briefly be evaluated.

Fourthly, the characteristics of the most successful and of the least successful clients will be examined.

At last, we shall cover some interesting incidentals.

Grades Received by the Clients

Just as schools measure the academic success of their students primarily by means of their grades, so also the project's orientation and mobility instructors were asked to assign a final grade on various phases and aspects of orientation and mobility to each client. A score system was used, with "4" standing for "excellent" or the best grade, "3" for "satisfactory," "2" for "poor," and "1" for "failure."

Unfortunately, we failed to receive the requested grades for every client. Our tabulations and analysis will, therefore, include only those clients who were properly graded. Since the failure to grade reflects on the instructor rather than on the clients, it is hoped that the graded clients are at least roughly representative of the whole project population.

The following phases or aspects of orientation and mobility learning were graded: a client's over-all attitude toward orientation and mobility; his over-all learning ability within areas of his orientation and mobility instruction; his over-all emotional stability; and his learning and performing ability in indoor mobility, residential mobility, small business areas, large business areas and travel by public transportation.

In Table 12, the frequency and percentage distribution of the grades in over-all attitude toward orientation and mobility of the juveniles is presented. Table 13 reports on the over-all ability and Table 14 on the emotional stability for the same group.

Table 12. Frequency and Percentage Distribution of Scores on Over-all Attitude Toward Orientation and Mobility for Juveniles

Score	Frequency	Percentage
4	13	33.33
3	15	38.46
2	6	15.38
1	5	12.82
Total	39	99.99

Table 13. Frequency and Percentage Distribution of Scores on Over-all Orientation and Mobility Ability for Juveniles

Score	Frequency	Percentage
4	15	35.71
3	22	52.38
2	5	11.90
1	-	-----
Total	42	99.99

Table 14. Frequency and Percentage Distribution of Scores on Emotional Stability in Orientation and Mobility for Juveniles

Score	Frequency	Percentage
4	11	24.44
3	20	44.44
2	8	17.78
1	6	13.33
Total	45	99.99

An examination of the preceding three tables shows that score "3" is in all three instances the mode, or the most frequently assigned grade, hence, most juvenile clients received the grade "satisfactory" on attitude, ability and emotional stability. Score "4," or the grade "excellent," is second highest on all three counts, accounting for from one-fourth to over one-third of all grades. Combining excellent and satisfactory grades, we find that almost 72 per cent of the juvenile clients were judged to have proper positive attitudes toward orientation and mobility; that 88 per cent were rated positively on their over-all ability in orientation and mobility; and that almost 69 per cent were seen as being emotionally stable in orientation and mobility learning.

We shall proceed to examine the socres received on indoor orientation and mobility in Table 15, the scores received in residential area mobility in Table 16, the scores obtained in the small business area mobility in Table 17, the scores for large business or downtown area travel in Table 18, and the scores for public transportation travel in Table 19.

Table 15. Frequency and Percentage Distribution of Scores on Indoor Orientation and Mobility Learning for Juveniles

Score	Frequency	Percentage
4	14	28.57
3	24	48.98
2	10	20.41
1	1	2.04
Total	49	100.00

Table 16. Frequency and Percentage Distribution of Scores on Residential Area Orientation and Mobility Learning for Juveniles

Score	Frequency	Percentage
4	3	15.79
3	10	52.63
2	4	21.05
1	2	10.53
Total	19	100.00

Table 17. Frequency and Percentage Distribution of Scores on Small Business Area Orientation and Mobility Learning for Juveniles

Score	Frequency	Percentage
4	2	18.18
3	5	45.45
2	2	18.18
1	2	18.18
Total	11	99.99

Table 18. Frequency and Percentage Distribution of Scores on Large Business or Downtown Area Orientation and Mobility Learning for Juveniles

Score	Frequency	Percentage
4	-	-----
3	1	16.67
2	2	33.33
1	3	50.00
Total	6	100.00

Table 19. Frequency and Percentage Distribution of Scores on Public Transportation Orientation and Mobility Learning for Juveniles

Score	Frequency	Percentage
4	1	16.67
3	2	33.33
2	-	-----
1	3	50.00
Total	6	100.00

An examination of Tables 15, 16 and 17 shows that in indoor, residential and small business area orientation and mobility learning, most scores for the juveniles are positive ("excellent" and "satisfactory" combined), i.e., 67.55 per cent in indoor, 68.42 per cent in residential and 63.63 per cent in small business area orientation and mobility learning.

For large business area and for public transportation orientation and mobility learning, score "1" or "failure" becomes the mode. It is not clear from the scant available data whether this failure is due to the lack of ability in the juveniles for such much more complex travel or, what seems more likely, to the lack of time on the part of the instructor to provide adequate continuous instruction until such more complex orientation and mobility skills are learned.

We may now turn to an examination of the orientation and mobility learning scores as received by the geriatric blind clients. In Table 20, the scores on over-all attitudes are presented, followed by the scores on over-all ability in Table 21, on emotional stability in Table 22, on indoor orientation and mobility in Table 23, on residential orientation and mobility in Table 24, on small business area orientation and mobility in Table 25, on large business or downtown area orientation and mobility in Table 26, and on public transportation orientation and mobility in Table 27.

Table 20. Frequency and Percentage Distribution of
Scores on Over-all Attitude Toward Learning Orientation and Mobility
for Geriatrics

Score	Frequency	Percentage
4	13	32.50
3	18	45.00
2	7	17.50
1	2	5.00
Total	40	100.00

Table 21. Frequency and Percentage Distribution of Scores on Over-all Ability in Learning Orientation and Mobility for Geriatrics

Score	Frequency	Percentage
4	7	17.95
3	23	58.97
2	7	17.95
1	2	5.13
Total	39	100.00

Table 22. Frequency and Percentage Distribution of Scores on Emotional Stability in Orientation and Mobility Learning for Geriatrics

Score	Frequency	Percentage
4	7	23.33
3	14	46.67
2	7	23.33
1	2	6.67
Total	30	100.00

Table 23. Frequency and Percentage Distribution of Scores on Indoor Orientation and Mobility Learning for Geriatrics

Score	Frequency	Percentage
4	2	5.89
3	23	67.65
2	7	20.59
1	2	5.89
Total	34	100.02

Table 24. Frequency and Percentage Distribution of Scores on Residential Orientation and Mobility Learning for Geriatrics

Score	Frequency	Percentage
4	3	9.68
3	15	48.39
2	12	38.71
1	1	3.23
Total	31	100.01

Table 25. Frequency and Percentage Distribution of Scores on Small Business Area Orientation and Mobility Learning for Geriatrics

Score	Frequency	Percentage
4	1	5.88
3	4	23.53
2	7	41.18
1	5	29.41
Total	17	100.00

Table 26. Frequency and Percentage Distribution of Scores on Large Business Area Orientation and Mobility Learning for Geriatrics

Score	Frequency	Percentage
4	2	13.33
3	2	13.33
2	5	33.33
1	6	40.00
Total	15	99.99

Table 27. Frequency and Percentage Distribution of Scores on Public Transportation Orientation and Mobility Learning for Geriatrics

Score	Frequency	Percentage
4	1	6.67
3	3	20.00
2	5	33.33
1	6	40.00
Total	15	100.00

A glance at the tables on the geriatric blind clients reveals several important findings:

First, the attitude of the clients toward orientation and mobility training has, in general, been good. Almost one-third of the clients received the highest possible score on their attitude, and 45 per cent received the next highest score ("3").

Combining the two scores, we can say that 77.50 per cent of the graded geriatric blind clients had a good attitude toward learning orientation and mobility. Note, however, that a small minority of the approached geriatric clients refused training and that these clients were not graded.

Secondly, almost 77 per cent of the geriatric clients received a positive score ("4" or "3") on their over-all ability in the covered orientation and mobility phases, although the highest score ("4") went to only 18 per cent of the graded clients (as contrasted with the 32.50 per cent for over-all attitude). Since the grades on any specific phase of the orientation and mobility learning are lower and since the over-all ability should have covered all given phases of training for any client, it seems that the instructors were inclined to be much more optimistic about a client's over-all or general ability and became more realistic or critical when they had to evaluate a specific phase of training. (This may lead to fascinating hypotheses on generality-specificity perspective.)

Thirdly, emotional stability, too, was graded favorably, with 23.33 per cent of the clients getting the highest score and 46.67 per cent the next highest score, i.e., 70 per cent of the geriatric blind clients were considered as being emotionally stable.

Fourthly, the grades fall sharply and consistently with the increasing complexity of the orientation and mobility phases: 73.54 per cent of the indoor orientation and mobility trainees received positive grades (scores "4" or "3"); in residential orientation and mobility the percentage fell to 58; in small business areas, to 29.41; in large business or downtown area, to 26.26, and in public transportation travel, to 26.67. (Note, however, that this decreasing ability here or among the juveniles is not due to age differentials, as our correlational analysis will show.)

These findings suggest that the geriatric blind clients do, in general, quite well in the indoor orientation and mobility training and most of them also succeed in the simpler residential or neighborhood orientation and mobility learning. Other phases are much more difficult to master and only a minority of the geriatrics will succeed in them under conditions such as in our project. It is possible and probable that substantially larger proportions of the geriatric (as well as of juvenile) clients could also effectively learn small business area and downtown independent travel, and also independent travel by public transportation. But this would require prolonged intensive training which, unfortunately, was not possible in our project due to the shortage of professionally trained peripatologists.

In Table 28, we will summarize the frequency and percentage distributions of all scores received by the juveniles and the geriatrics in this project, irrespective of the orientation and mobility phase.

Table 28. Frequency and Percentage Distribution of All Scores Received on Orientation and Mobility by Juveniles and Geriatrics

Score	Juveniles		Geriatrics		Total	
	f	%	f	%	f	%
4	59	27.19	36	16.29	95	21.69
3	99	45.62	102	46.15	201	45.89
2	37	17.05	57	25.79	94	21.46
1	22	10.14	26	11.76	48	10.96
Total	217	100.00	221	99.99	438	100.00

An examination of Table 28 reveals that about equal proportions of juveniles and geriatrics received score "3" or "satisfactory" (roughly 46 per cent). However, over 27 per cent of the juveniles, but only somewhat over 16 per cent of the geriatrics received the highest score ("4" or "excellent"). For all clients combined, the most frequent score was "3" (45.89 per cent) and the next most frequent "4" (21.69 per cent). Score "2", or "poor," was nearly as frequent as score "4" (21.46 per cent), and score "1" or "failure" was least frequent; only about 11 per cent of all grades assigned on this project indicate failure.

In Table 29, we shall combine scores "4" and "3" into a single category "satisfactory," and scores "2" and "1" into the category "unsatisfactory."

Table 29. Frequency and Percentage Distribution of Satisfactory and Unsatisfactory Scores for Juveniles and Geriatrics on All Phases of Orientation and Mobility Learning

Score	Juveniles		Geriatrics		Total	
	f	%	f	%	f	%
Satisfactory	158	72.81	138	62.44	296	67.57
Unsatisfactory	59	27.16	83	37.55	142	32.42
Total	217	99.99	221	99.99	438	99.99

Table 29 reveals that almost 73 per cent of all juveniles received satisfactory scores under this combined evaluation, while the corresponding percentage for the geriatrics was slightly less than 68. Note, of course, that poor performance, which might still be considered as "passing," is here also included in the category of "unsatisfactory."

In order to see whether there was a statistically significant difference in the distribution of satisfactory and unsatisfactory scores between the juveniles and the geriatric clients, a chi square test was performed. The result was $x^2 = 5.4107$, $p = < .05$, i.e., a significant difference was found on the 5 per cent level or, in other words, there is less than 5 per cent chance that such higher scores as received by the juveniles could be due to chance. Thus, comparing juvenile with the geriatric orientation and mobility learning, we may say that juveniles are graded significantly better than the geriatrics. This is most probably due to their actual better learning capacity and performance, but the test does not confirm this beyond doubt. It would also be possible that, consciously or unconsciously, instructors tend to grade juveniles more favorably even when performance is on the same level of learning achievement. (But the latter argument is of about the same nature as suggestions that girl students get better grades, irrespective of performance.)

Correlational Analysis

Since the project population consisted of two age groups, the blind juveniles and the geriatric blind, the most obvious task of research was to assess the differences (if any) in orientation and mobility learning by age.

Analysis by means of the chi square test has already shown that juveniles tended to receive significantly better grades or scores than the geriatric blind.

In the present correlational analysis we shall try to determine whether, and to what extent, age is associated with scores within each age category.

In the juvenile category, ages from 7 to 20 years were included. Among the geriatrics, persons between 50 and 96 years of age participated.

What was the role of age within each of these categories? Did, for instance, older juveniles tend to learn better than younger juveniles and older geriatrics worse than younger geriatrics? Did the grades or scores of the juveniles rise and those of the geriatrics fall with their increasing age?

The answer to these questions is provided by means of correlational analysis.

In Table 30, correlation coefficients on juveniles for age and selected orientation and mobility aspects and phases are presented.

Table 30. Correlation Coefficients for Age and Scores on Selected Aspects and Phases of Orientation and Mobility Learning for Juveniles

Scores on	r
Over-all attitude	.14
Over-all ability	.27
Emotional stability	.09
Indoor orientation and mobility	.04
Residential orientation and mobility	.12
Small business area orientation and mobility	.07
Large business area orientation and mobility	.12
Public transportation travel	-.10

All coefficients are so low that it could be said that, within the age range between seven and 20 years, age shows almost no association with orientation and mobility learning. It cannot be said that within this age range, either younger or older juveniles tend to get higher or lower grades to any important extent. Any of the enumerated mobility phases could be taught at any age between seven and 20, provided the prerequisites of that phase had already been met. The generalized impression of over-all ability alone shows a positive correlation as high as .27, but even this correlation is too low to be taken seriously and may reflect (especially because of its greater "generality") the age-stereotyped thinking of the grade-assigning instructors more than the actual ability level. All correlations with the exception of public transportation travel are positive. If they were higher than they actually are, they would suggest that older juveniles tend to get better grades on orientation and mobility learning than younger juveniles, with the exception of public transportation travel where the younger juveniles tend to do better. But the coefficients are too low to warrant any such statement. They suggest merely that between the ages of seven and 20, age differential is of little importance for success in orientation and mobility learning.

In Table 31, the corresponding information is presented for the geriatric clients.

Table 31. Correlation Coefficients for Age and Scores on Selected Aspects and Phases of Orientation and Mobility Learning for Geriatric Clients

Scores on	r
Over-all attitude	.17
Over-all ability	-.06
Emotional stability	.13
Indoor orientation and mobility	.04
Small business area orientation and mobility	-.14
Large business area orientation and mobility	-.26
Public transportation travel	.04

As in the case of the juveniles, the correlation coefficients for the geriatric group are too low to suggest that there is any important association between age and orientation and mobility learning within the geriatric group. Over-all ability, and orientation and mobility learning in small and large business areas are negatively correlated, but the correlations are much too low to justify any statement that older geriatric clients tend to perform less effectively in these areas than the younger geriatric clients.

Our analysis then shows that while there are significant learning differences between the juvenile group (7-20 years of age) and the geriatric group (between 50 and 96 years of age) as established by means of grades or scores, there are no important learning differences by age within either age category.

While one would need confirmation by additional independent studies to establish the general validity of our findings, these findings do suggest that age differences within any of the two studied age groups are of little or no consequence. After seven years of age (and perhaps earlier, which we do not know), it is never too early in terms of age alone to start teaching any orientation and mobility skill for which a juvenile is ready. Similarly, in the geriatric group, age per se should never discourage the orientation and mobility training in any desired and needed phase, provided the needed prerequisites have been met.

Finally, the association between the duration of blindness and the level of scores on the over-all attitude and ability was examined. Both correlation coefficients were very low, -.5 for the over-all attitude and -.10 for the over-all ability. Thus, it can be said that, according to our data, no important association was found between the number of years a person had been blind before he was given his orientation and mobility training and his over-all attitude toward and ability in that training.

Evaluation of Special Group Projects

(which were given in addition to the regular individual training)

Conferences with staff members serving the blind. Generally these conferences served a very useful purpose in that they tended to increase the interest in, and the practical, applicable knowledge about the problems of blindness in participants from social agencies and institutions. It was found that anxieties of various staff members serving the blind could be reduced or eliminated by means of simple explanations and practical demonstrations. On the other hand, the Society's peripatologists gained much insight into the extent and nature of problems connected with institutionalized blind persons.

Seminars and workshops for parents, teachers and representatives of agencies. These seminars and workshops were carefully planned and excellently executed. They immediately attracted and maintained the interest of all participants who gained valuable insights through lectures, demonstrations, participation and discussion. The active participation in demonstrations (e.g., blindfold) and in group discussion seems to have been a feature of special value, as (according to spontaneous reports) it increased the insight of participants and, especially, as it may be believed to have actually produced group reinforcement of individual decisions, thus leading to more enduring effects.[1] Unfortunately, attendance was relatively small.

Experimentation in nursing homes. The most important result of this experimentation was the finding that one or more nursing home staff members could effectively be trained to give any needed orientation and mobility training to blind geriatric inmates under the guidance and supervision of a professional peripatologist. This finding seems to be especially important in view of the widespread visual handicaps in various nursing homes and homes and hospitals for the aged and in view of the shortage of trained peripatologists.

Orientation and mobility in a psychiatric hospital. The case of Ann was valuable in demonstrating the value of "in-betweens." Ann, who did not respond to a professional peripatologist, soon learned orientation and mobility when taught by an "in-between," another psychiatric patient who had in turn been trained by the peripatologist to give training to Ann. This approach may have wide application in instances where a lack of rapport, or an emotional block, prevent a client from learning. Since the process has also proven therapeutic to the patient-instructor, the value of this technique is doubled.

A general suggestion would seem to follow from the project's findings in the psychiatric hospital, in nursing homes and, partly, at the Sight Center, where mobility assistants were successfully trained by the peripatologists: professional peripatologists could reach an incomparably larger number of clients by training and supervising other sighted persons who would then train the blind in simpler phases of orientation and mobility skills.

Influence on the schools. The project succeeded in encouraging several schools to include their blind pupils in physical education classes and in various recreational activities -- a breakthrough which is very important for physical as well as social and psychological development of blind children.

Summer Teen Programs. Each summer, one or more Summer Teen Programs were organized for blind teenagers, consisting, as a rule, of two full-day sessions for four consecutive weeks. Mrs. Martha Ball Rosemeyer, who had imaginatively planned and supervised these programs is, apparently, right in her assertion that these programs "were extremely meaningful to the teens participating in them." Considerable progress was made not only in the narrower area of orientation and mobility, but also in other areas (sensory training, activities of daily living, eating habits and general etiquette, physical education and social adjustment). The only regret on the part of the staff and the clients is that only smaller groups of teens could be included due to shortage of personnel. The selection, under such circumstances, has also become, of necessity, arbitrary and many teens who would desperately need such activities could not be included. (See "Summer Teen Program," by Martha Ball Rosemeyer, in the Appendix.)

Campings at Highbrook Lodge. Both juvenile and geriatric orientation and mobility clients were given ample opportunity for participation in the Society's scenic Highbrook camping facilities and programs. Mr. Ralph E. Diamond, Coordinator of Camping Services, and Miss Patricia Stone, Coordinator of Children's Services, together with their staff and volunteer assistants, used their highly developed art of dealing with the blind in such a way as to make summer camps one of the happiest, and also one of the most profitable experiences for most blind participants. A special film was produced by The Cleveland Society for the Blind which shows the rich facilities and programs at the Highbrook Lodge and a research study on the effectiveness of the camping programs as an adjunct to rehabilitation will be published at a later date.

Characteristics of Successful Clients

While one would prefer to approach this topic by means of correlational and factor analyses, the absence of the necessary data has dictated a descriptive questionnaire-type approach. The orientation and mobility instructors were asked to describe the characteristics of their most successful clients. Here are their answers:

> Mr. A.: Highly motivated, no secondary disabilities, between the ages of 14 and 60, active, good coordination, ability to form spatial relationships, ability to reason.
>
> Mrs. R.: Had an objective in mind for learning how to move about or were highly motivated to become independent and/or handle blindness. Relating to children [among children], all of the successful good learners and doers had a history of normal daily experiences which enlarged their concepts and contact with reality outside themselves.
>
> Mrs. S.: Good physical condition, especially in older group; good coordination and wide experiences.
>
> Mr. L.: Very personable, enthusiastic, anxious to achieve the intended goal. Irrespective of age, very energetic, highly motivated.

> Mr. P.: Need and alertness. Clients who were motivated by good intensive casework counseling were more realistically inclined to accomplish the tasks of mobility. I wish to suggest a great deal of success depended on casework contacts with clients.

Some of the characteristics mentioned by the instructors are supported by other sources, notably motivation, energy, enthusiasm, alertness, conceptualization, coordination, etc.[2] The case studies which we had presented in Chapter 6 also suggest the correctness of Mrs. R.'s observation that "all the successful good learners and doers had a history of normal daily experiences which enlarged their concepts and contact with reality outside themselves."

Other comments may need qualification (which was probably intended by the writers). The qualification is, other things being equal, good intelligence, good physical condition and absence of secondary disabilities are, of course, valuable assets in learning orientation and mobility. But it would be a mistake to conclude that intelligent persons who are in physically good condition will of necessity be better learners than less intelligent clients or those suffering from some secondary disability. Some persons suffering from one or more secondary disabilities have been known to be highly proficient learners and doers in mobility, while some highly intelligent and physically healthy persons had personality traits or emotional blocks which minimized their learning,[3] as it has also been suggested by some of our case studies in Chapter 6. Again, less intelligent but more highly motivated clients can learn mobility, while others with high I.Q.'s fail.[4]

The value of casework for orientation and mobility learning could not be properly tested in this study, but Mr. P.'s comment may be pertinent with regard to increasing motivation, improving rapport, lessening anxiety, etc., in clients who need special emotional support. The Cleveland Society for the Blind has routinely used casework, rehabilitation, home teaching, camping, volunteer and group services with all such clients, based on individual client needs and availability of workers and facilities.[5]

With regard to a client's age, our correlational analysis presented earlier in this chapter suggests that chronological age, while associated with many special problems,[6] may be considerably less important in orientation and mobility learning than it has usually been assumed.

Characteristics of the Least Successful Clients

The orientation and mobility instructors listed the following characteristics of the least successful clients:

> Mr. A.: Inability to form spatial relationships, poor reasoning ability, secondary disabilities, poor motivation, lack of social experience and lack of prior opportunity for independence.
>
> Mrs. R.: The least successful clients (children) were unable to conceptualize the reality outside themselves, had been overprotected and/or undernourished in everyday learning experiences, and in addition received no encouragement or [actually received] discouragement in the mobility program from parents. Among the adults, the least successful were those who had no desire to rise up and overcome the inconveniences and disabilities connected with blindness, who had a great hostility toward the sighted world (this hostility having existed prior to blindness but aimed in another direction), or who were physically ill.
>
> Mrs. S.: Fear, senility, overprotectiveness on part of family.
>
> Mr. L.: Confused, poor concept of direction, severe physical disability, uncertainty about future travel needs.
>
> Mr. P.: Many of these clients are simply not motivated. Some clients really never understood the meaning of independence. Although we tried to give mobility [instruction] to as many as possible, some clients were unrealistically referred.

Overprotectiveness in early socialization encourages dependence on others, reduces motivation for independent travel, increases anxiety and limits the overall conceptualization and skill level, as has been clearly illustrated in the case history of Maria. Similarly, those adults who were poorly motivated, insecure, fearful or hostile prior to their blindness are likely to be even more so as their problems become aggravated by old age and the loss of vision.

Situational factors, such as the loss of her husband by one of the project clients, may temporarily disrupt instruction, but things will return to normal if previous life habits were favorable to learning.

Extreme physical disabilities will, of course, incapacitate a client and prevent his learning, but it is surprising how much disability can be overcome by properly motivated clients.

Since the early socialization of a blind child within his family is of such extreme importance (as, for instance, suggested by the contrasts between Maria's and Betty's case histories), it is imperative that all parents of blind children be, as early as possible, systematically taught the proper ways to truly help their blind children. Brochures, films, visiting teachers and workshops should be among the means employed to educate all parents of blind children (and also teachers, priests, ministers, and youth workers). These "media" should explain in clear terms the ways and techniques which will benefit the blind children and equally vividly picture the wrong approaches, especially overprotectiveness, and the consequences of such approaches.

It seems that every dollar invested in such early education would save thousands of dollars during the blind person's lifetime and, more important, it could prevent many heartbreaking developments, such as those we have witnessed in the case studies of Maria and Ann.

Incidentals

In the course of a demonstration project, many things happen which do not have their pre-established niche in research.

Take, for instance, this excerpt from a letter written by the Leader of the Girl Scout Troop 405 to Mrs. Myra Oryshkewych, the caseworker of one of our juvenile clients:

> I thought you would be interested in knowing that Regina is getting along extremely well in our Brownie troop. In spite of the fact that she is quiet, she is friendly, independent and a very willing worker. In some respects I might say that she has been an asset. We now seldom hear, "I can't," from the other girls. This was not the case last year.
>
> Regina has been able to participate in all our games and projects, in some way. For some of our games she plays piano.

This letter clearly suggests that blind children such as Regina can benefit from scouting and that other Scouts may, in turn, be inspired by their blind fellow member. Undoubtedly, the Scouts and similar youth organizations could contribute to a considerably greater extent to the rehabilitation of the blind children and benefit in their turn.[7]

As in other kinds of learning and rehabilitation, the improvement of a client's self-concept is very important. Here, it may be said that an improved self-concept will most probably improve a client's ability to learn orientation and mobility. Conversely, generous praise for accomplishment in the area of orientation and mobility, as well as in other areas, will improve the client's self-concept and facilitate further learning.[8]

Just one illustration from many similar cases on our records. According to Mr. George Auzenne,

> Barbara's emotional problems were just as great as her physical problems. She was passive and her self-concept was extremely poor. She would constantly say how "dumb" she was and would never raise a question about anything, even though it was obvious that she did not understand. When asked a question or upon making a mistake, she would become so tense and nervous as to be unable to speak. Her whole body would sometimes convulse in "jerky" movements.
>
> By the time training was terminated, one could detect subtle changes in her attitudes. She would not mention her "dumbness" as

> often and she would voluntarily ask questions. She began to see independence in all areas as being necessary.

Several examples from our records suggest that physical strength, just as social and psychological adjustment, frequently improved in the course of orientation and mobility training.

Mr. René Paquin reports:

> Henrietta at first had difficulty maintaining control of the cane. Her hand and arm were just barely strong enough. However, as the lessons progressed, Henrietta gained strength and control.

Finally, let us add "color" by mentioning a few "peculiarities."

One juvenile client was reported by Mr. Paquin as having a "very acute sense of facial vision" (J-034).

Maria, with whom we are already familiar, daydreamed about being a witch and Ann hoped to become an actress or an opera star.

A client was reluctant to accept the cane, saying that people would stare at her wondering why she was carrying a cane. "... A cane makes people look so sick!"

Mrs. S., age 95, refused any service, saying, "I don't want to work. I don't want to do anything. I will rest until I die."

Another client, age 64, insisted on finding a job.

A widow claimed: "I will see again. Only my hard work caused my blindness. With much rest, my vision will come back."

A client, age 72, was good learner at first. After her husband died, she could learn nothing for several months. Then, suddenly, she again became a good learner. (Note here that many clients, similarly, cannot learn during their "period of mourning for the loss of eyesight." Obviously, one must exercise extreme caution in distinguishing permanent traits from situational traits.)

Mrs. W. had until recently light projection only on which she relied heavily.

> Today she speaks of this shaft of light and how good it was when

she had it. She noted her fear of walking because now she does not have this shaft of light to guide her. She seemed very discouraged.

Note on another client:

> "All I do is sit, sit and sit." This is what this 64-year-old man is tired of doing. ... This man is daring and seems willing to try almost anything. He pushes himself to his maximum.

However,

> Mrs. T.'s attitude is that blind persons should be watched over by everyone, especially pedestrians and motorists. This could interfere with safety aspects of mobility.

Mr. S. was quite reluctant to accept a cane. He said he could not see how a cane could possibly help him. Later, he reported that the cane made an independent man out of him. He needed only a few hints to learn mobility.

One client blamed the loss of her economic status on her blindness and wanted to become an independent traveler as soon as possible to regain her place in society. She was enthusiastic about mobility and a very good learner.

Another client used blindness as an excuse for every failure in his life and was a very poor learner.

All these variations, contrasts and "peculiarities" go, of course, to show that the blind are, like the rest of us, very human: they are persons with different personalities and characters, strengths and weaknesses, assets and liabilities.

It was one of the functions of the orientation and mobility project to try to maximize the existing strengths and assets and to develop new ones, while minimizing weaknesses and preventing new liabilities, such as blindisms, from developing.

While grades and correlations can be presented in tabular form, many other successes, improvements and successful preventive steps are evasive and remain unnoticed.

This evasive nature of attempts at a complete and fully just evaluation or, if you wish, appreciation, of a project such as this has also been well suggested by a note written by Mrs. Elsie Kratzer, an elderly client, to Mr. Anthony Lewis, a mobility assistant, upon the completion of her training:

> Dear Mr. Lewis:
>
> I am sure that today even I do not know the extent of my appreciation of my newly found freedom. I am deeply grateful.
>
> Thank you for your interest, patience and kindness.
>
> Elsie Kratzer.

The author, in his turn, wishes to direct these same words of thanks to all who made this project possible and a success: to Vocational Rehabilitation Administration of the U. S. Department of Health, Education and Welfare; to the Cleveland Society for the Blind, especially to its tireless Executive Director, Mr. Cleo B. Dolan, and to all its past and present orientation and mobility staff members; to the American Foundation for the Blind which has been helpful in every phase of action and research by means of its indispensable publications; to Kent State University which has generously provided a favorable research atmosphere; to all other agencies and institutions; to parents, relatives and friends of the blind clients; to Society's tireless volunteers; and, last but not least, to the project's blind clients themselves who were not only our orientation and mobility students but also our teachers about the richness, resourcefulness, complexity and, ultimately, predictability of human behavior.

FOOTNOTES

1. Cf. Kurt Lewin, "Group Decision and Social Change," in Guy E. Swanson *et al.*, Eds., *Readings in Social Psychology* (Revised Edition), New York: Henry Holt and Company, 1952, pp. 459-473.

2. Cf. Thomas J. Murphy, "Motivation for Mobility," New Outlook for the Blind," May, 1965, pp. 178-180.

3. Cf. Wilma Selye and John E. Thomas, "Is Mobility Feasible with: A Blind Girl with Leg Braces and Crutches? A Deaf Girl with a Tested I.Q. of 50? A Blind Boy with an I.Q. of 51?" New Outlook for the Blind, June, 1966, pp. 187-190.

4. Cf. Thomas J. Murphy, "Teaching Orientation and Mobility to Mentally Retarded Blind Persons," New Outlook for the Blind, November, 1964, pp. 285-287.

5. Cf. Frederic A. Silver, "How the Home Teacher Can Help the Mobility Instructor," New Outlook for the Blind, May, 1965, pp. 173-174.

6. Cf. J. C. Calligan, C.B.E., "Special Problems of Aging Blind Persons in the Modern World," New Outlook for the Blind, February, 1965, pp. 45-49.

7. Cf. Giles Edward Gobetz and Jerrine Leichhardt, Scouting and the Disadvantaged Girl, Cleveland: Community Action for Youth, 1966.

8. For an excellent bibliography on the subject of self-concept, see Wilbur B. Brookover et al., Self-Concept of Ability and School Achievement, II, East Lansing, Michigan: Michigan State University, 1965, pp. 215-219.

APPENDIX

Summer Teen Program, 1967*

By

Martha Ball Rosemeyer

From the spontaneous reaction and evaluation of both instructors and trainees, the Summer Teen Program in 1967 was successful, beneficial and enjoyable. The frequent complaint about the program was that it was not long enough -- and this was in actuality its greatest limitation.

From the beginning of the planning stages, through the training of the staff, and throughout the program itself, I knew that eight sessions -- four weeks in length -- were not sufficient to give these teens who were blind all that they needed in order to function effectively in the sighted world.

I also did not operate on the premise that "a little bit is better than nothing," for this is a very dangerous principle of service which exposes the blind person to the possibilities of an activity without preparing him adequately to perform the activity with skill, confidence, safety and effectiveness.

Instead, with the time limitation in mind, the Summer Teen Program of 1967 was designed for a 4-week, 8-session period, and the program was planned around this time period. Staff was repeatedly advised that, except in the area of orientation and mobility, there was very little chance that any phase of the program would be offered elsewhere to any one of the participants on any kind of formalized basis. Therefore, we attempted to make the four courses in the program as complete and as meaningful as possible.

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*We are including this special report to illustrate the extent and nature of the required staff planning and work, and of client activities, which characterize a single special program for a single small group of clients. We are grateful to Mrs. Rosemeyer for her excellent contribution. G.E.G.

The Physical Education Course had as its objectives:

a. the development of a more accurate and over-all awareness of the body parts, their movements and functions.

b. the development of confidence in one's own movement and appearance when standing, walking, sitting, based on awareness, practice and feedback.

The Sensory Training Course was considered a basic course in the development of the teens' awareness of the outside environment through the use of their remaining senses, i.e., in order to function skillfully and effectively in their surroundings, they must be able to get the maximum amount of information available from each one of their remaining senses.

The Sensory Training Course included:

a. an introduction to each one of the human senses, how each functions, and the type of information available from each.

b. experience by the trainee in gathering and evaluating information from each one of the senses.

c. exercises to help the trainee integrate all sensory information available in the environment and make an accurate assessment as to the situation at hand.

A direct carry-over was noted from sensory training to the skills involved in orientation and mobility.

Except for the advanced students, the eight sessions in Orientation and Mobility Course were necessarily concerned with the following:

a. basic orientation to the rehabilitation center where the training program was being held, so that the trainees could move about freely and safely on their own.

b. instruction and experience in the use of self-protective techniques.

c. instruction in and familiarization with orientational and environmental concepts which the blind person many times does not develop due to lack of experience or learning opportunities, e.g., directional points (north, south, left, right, up, behind, on top, etc.); the nature, types and shapes of intersections (taught with models of intersections, stop signs, and an actual 4-way traffic light); and the patterns of vehicular and pedestrian traffic.

All but three of the teens enrolled in the Summer Teen Program had had some previous Orientation and Mobility training. During the program, six out of the eight worked with the long cane in the following stages:

1. Two continued their sidewalk travel and street crossings, which they had been working on in their individual mobility training programs the previous school semester.

2. The two partially-sighted trainees, after completing the three basic stages enumerated above, began to learn how to use the long cane and got as far as sidewalk travel. In addition, they were evaluated as to their use of their partial vision in mobility situations.

3. Two began learning the basic techniques of the long cane in the building.

4. The remaining two did not progress beyond basic orientational and conceptual exercises, but seemed to make real strides in grasping basic concepts.

The Activities of Daily Living Course was by far the most well-liked of the courses and included learning of skills which were of most obvious importance to the teenager who is blind. It involved the following:

1. Kitchen activities, including preparing a meal and setting a table.

2. Eating techniques and etiquette.
3. Personal hygiene and grooming.
4. Techniques of social acceptance in the sighted world.

In addition to the four skill courses offered in the Summer Teen Program, half of the lunch hour was spent in a group discussion of topics which seemed pertinent to teenagers:

1. Reaction of sighted people to a blind person
2. Mobility aids and devices
3. Dancing
3. Handling introductions and other social interactions
5. The importance of appearance
6. Informational progress
7. Attitudes toward blindness
8. Evaluation of the program.

Since no follow-up was done to determine if and how the different phases of the program were beneficial to the participants, no broad, far-reaching statement can be made about its effectiveness. However, it is my general conclusion that this program was extremely meaningful to the eight teens participating in it.

First, it was based on a knowledgeable assessment of their needs, desires and drives as normal teenagers.

Second, it attempted to meet some of their needs in the areas of daily skills and confidence whose fulfillment is vital to the development of an integrated adult self-image.

And third, it took positive steps to fill some of the social and attitudinal gaps which could prevent these otherwise normal teens from participating fully and effectively in the sighted world.

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